

Figure 12-2

# Pediatric AIDS Cases Diagnosed 1994 - 1997 by Race/Ethnicity, Exposure Category, Age at Diagnosis, Case Rate per 100,000 Population and Residence

New York State, Cases Confirmed through April 1998\*

	New York State	Bronx	Brooklyn	Manhattan	Queens	Staten Island	NYC-Borough Unknown	Rest of State
<b>Race/Ethnicity</b>								
White	21	0	4	1	4	2	0	10
Black	227	41	86	30	35	2	1	32
Hispanic	120	53	30	16	9	1	0	11
Asian/Pacific Islander	2	0	1	1	0	0	0	0
Native American/ Alaskan Native	1	0	0	0	0	0	0	1
Unknown	2	0	1	0	0	0	0	1
<b>Exposure Category</b>								
Maternal Transmission— Mother Injected Drugs	113	31	31	15	16	2	0	18
Maternal Transmission— Other Maternal Risk	238	62	84	28	29	3	1	31
Undetermined	22	1	7	5	3	0	0	6
<b>Age at Diagnosis</b>								
0-2	177	54	55	21	21	2	1	23
3-5	90	21	30	12	13	2	0	12
6-9	74	13	25	11	10	0	0	15
10-12	32	6	12	4	4	1	0	5
<b>Total</b>	<b>373</b>	<b>94</b>	<b>122</b>	<b>48</b>	<b>48</b>	<b>5</b>	<b>1</b>	<b>55</b>
<b>AIDS Case Rate per 100,000 Population†</b>	<b>11.8</b>	<b>37.6</b>	<b>27.0</b>	<b>25.8</b>	<b>16.0</b>	<b>7.4</b>	<b>—</b>	<b>2.9</b>

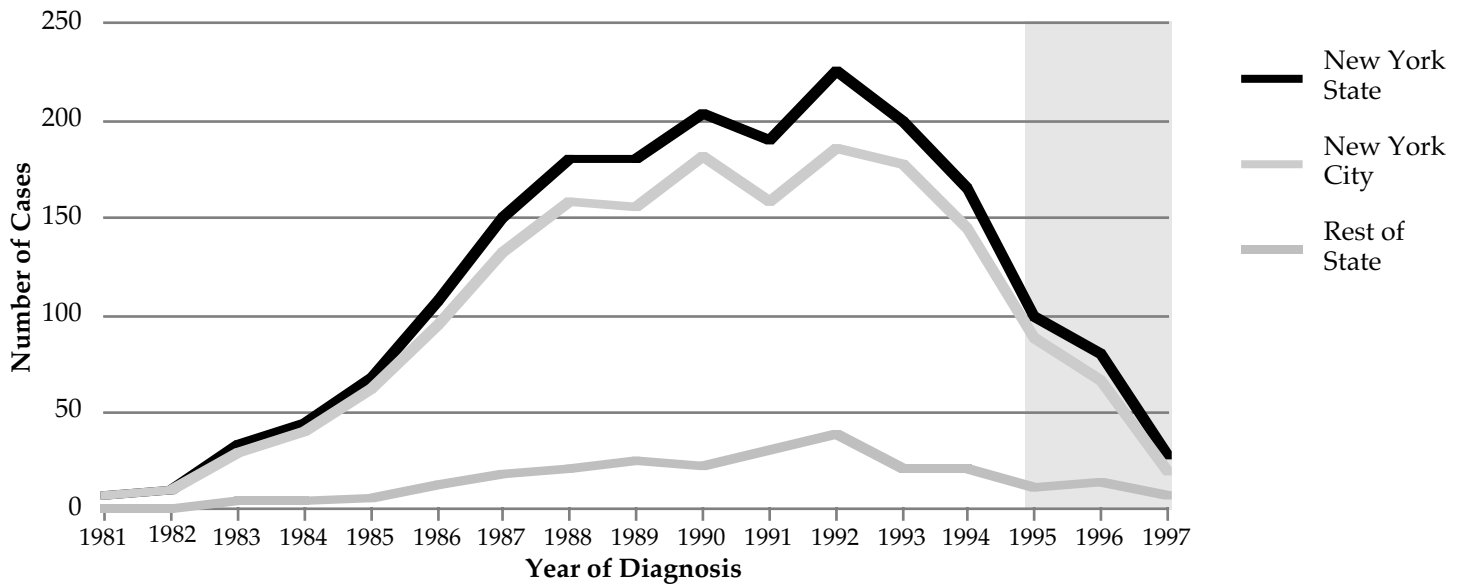
\* Data for 1996 and 1997 are incomplete due to lag in case reporting and time required for case confirmation.

† Based on 1990 U.S. Census data for children 0-12 years of age.

Figure 12-3

## Pediatric AIDS Cases by Year of Diagnosis\*

New York State, Cases Confirmed through April 1998



	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 <sup>†</sup>	1997 <sup>†</sup>
New York State	8	10	34	44	68	108	150	180	180	204	190	225	199	165	100	80	28
New York City	8	10	30	40	62	95	132	159	155	182	159	186	178	144	88	66	20
Rest of State	0	0	4	4	6	13	18	21	25	22	31	39	21	21	12	14	8

\* All cases younger than 13 years of age at diagnosis.

† Data for 1996 and 1997 are incomplete due to lag in case reporting and time required for case confirmation.

Figure 12-4

# Cumulative AIDS Cases Among Children Infected Perinatally by Race/Ethnicity, Age at Diagnosis, Residence, Current Age and Mother's Exposure Category

New York State, Cases Confirmed through April 1998

	Mother's Exposure Category					
	Injection Drug User		Sexual Contact with HIV+ Man		Other/Unknown*	
	Number	Percent	Number	Percent	Number	Percent
<b>Race/Ethnicity</b>						
White	101	10.1	44	8.4	27	7.4
Black	546	54.6	251	47.9	258	70.3
Hispanic	349	34.9	223	42.6	79	21.5
Asian/Pacific Islander	0	—	4	0.8	1	0.3
Native American/Alaskan Native	0	—	1	0.2	1	0.3
Unknown	4	0.4	1	0.2	1	0.3
<b>Age at Diagnosis</b>						
0-2 years	643	64.3	344	65.6	226	61.6
3-5 years	189	18.9	104	19.8	72	19.6
6-9 years	130	13.0	58	11.1	58	15.8
10-12 years	38	3.8	18	3.4	11	3.0
<b>Residence</b>						
Bronx	277	27.7	148	28.2	72	19.6
Brooklyn	260	26.0	181	34.5	146	39.8
Manhattan	194	19.4	78	14.9	54	14.7
Queens	111	11.1	49	9.4	49	13.4
Staten Island	22	2.2	8	1.5	4	1.1
New York City—Borough Unknown	0	—	1	0.2	1	0.3
Rest of State	136	13.6	59	11.3	41	11.2
<b>Current Age (Living with AIDS)</b>						
0-5 years	24	2.4	33	6.3	53	14.4
6-10 years	158	15.8	99	18.9	70	19.1
11-15 years	140	14.0	48	9.2	29	7.9
16-21 years	16	1.6	6	1.1	2	0.5
Deceased	662	66.2	338	64.5	213	58.0
<b>Total</b>	<b>1,000</b>	<b>100.0</b>	<b>524</b>	<b>100.0</b>	<b>367</b>	<b>100.0</b>

\* Includes 21 cases for whom maternal HIV exposure was receipt of transfusion/tissue. Exposure category for the remaining 346 mothers was not reported.

Figure 12-5

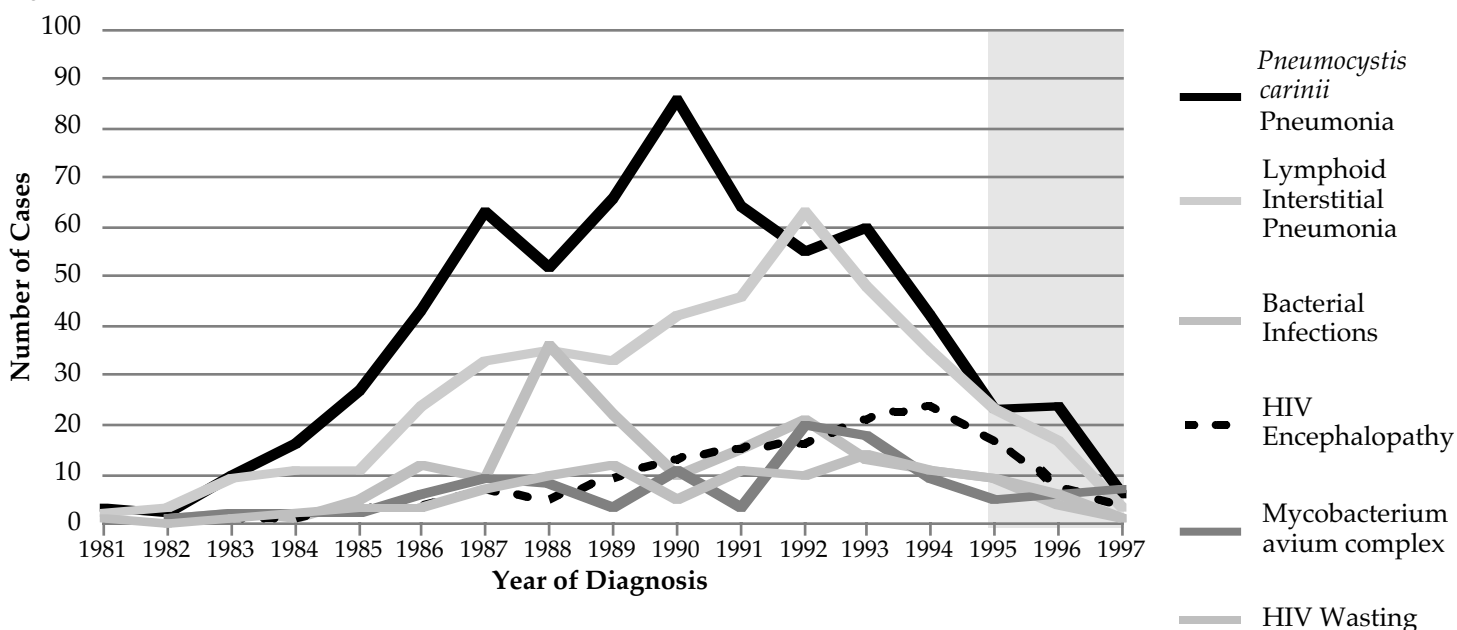
## Selected Diseases at Diagnosis\* Among Pediatric AIDS Cases by Year of Diagnosis

New York State, Cases Confirmed through April 1998

Figure 12-5a

	<i>Pneumocystis carinii</i> Pneumonia	Lymphoid Interstitial Pneumonia	Bacterial Infections	HIV Encephalopathy	Mycobacterium avium complex	HIV Wasting
1981	3	2	0	0	0	1
1982	2	3	1	0	1	0
1983	10	9	2	1	2	1
1984	16	11	1	1	2	2
1985	27	11	5	3	2	3
1986	43	24	12	3	6	3
1987	63	33	9	7	9	7
1988	52	35	36	5	8	10
1989	66	33	22	9	3	12
1990	86	42	10	13	11	5
1991	64	46	15	15	3	11
1992	55	63	21	16	20	10
1993	60	48	13	21	18	14
1994	42	35	11	24	9	11
1995	23	23	9	17	5	9
1996†	24	17	4	8	6	6
1997†	6	3	1	3	7	1
<b>Total</b>	<b>642</b>	<b>438</b>	<b>172</b>	<b>146</b>	<b>112</b>	<b>106</b>

Figure 12-3



\* Based on initial AIDS-defining condition; more than one condition may have been reported at the time of diagnosis.

† Data for 1996 and 1997 are incomplete due to lag in case reporting and time required for case confirmation.

### AIDS Cases Among New York State Adolescents

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In the last four years (1994-1997), 343 AIDS cases among adolescents and young adults (aged 13-21) have been diagnosed in New York State; 64.4 percent of these were aged 19-21 at the time of diagnosis (see Figure 13-1). However, because of the average 10-year incubation period between HIV infection and AIDS diagnosis, many receiving AIDS diagnoses in their twenties were probably infected with HIV in their teens.

Of these 343 cases, a large proportion (45.8%) had an undetermined HIV exposure category (see Figure 13-1). Of the 186 with an identified risk, 35.5 percent were cases attributed to heterosexual contact, 34.9 percent were MSM and 18.3 percent were IDUs. Among adolescents diagnosed 1994-1997 with a known exposure category, exposure varied by race/ethnicity (see Figure 13-2). The predominant HIV exposure categories noted among white adolescents were heterosexual transmission (10 cases) and hemophilia (nine cases). Among

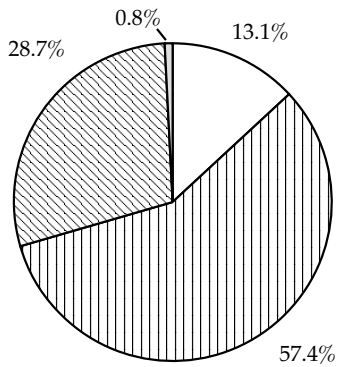
blacks, heterosexual transmission (36 cases) and male-to-male sex (32 cases) predominated. Among Hispanics, exposures were predominantly from male-to-male sex (27 cases), injecting drug use (18 cases) and heterosexual transmission (18 cases). Three cases were diagnosed in this period among adolescent Asian/Pacific Islanders, two of whom were heterosexually exposed and one had an undetermined exposure category. One case was diagnosed among Native American/Alaskan Native adolescents in this period. More than half of cases reported among black adolescents and more than one-third among Hispanics have an undetermined mode of HIV exposure.

Among adolescent and young adult women diagnosed 1994-1997, heterosexual contact was the predominant HIV exposure, accounting for more than three-quarters of cases with an identified risk (see Figure 13-3). Injecting drug use accounted for 17.9 percent of cases in this group.

Figure 13-1

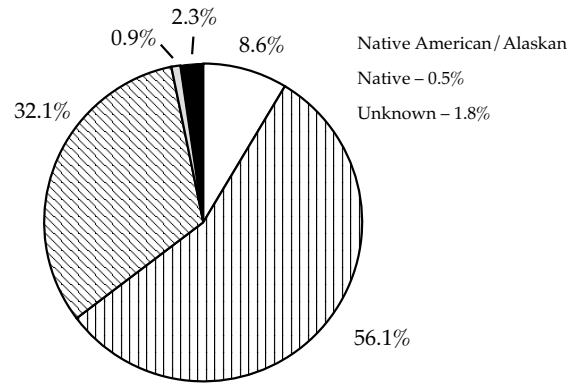
# AIDS Cases Among Adolescents Ages 13 - 21 Diagnosed 1994 - 1997 by Age at Diagnosis, Race/Ethnicity, Gender and Exposure Category New York State, Cases Confirmed through April 1998

Figure 13-1a **Ages 13-18 (N=122)**



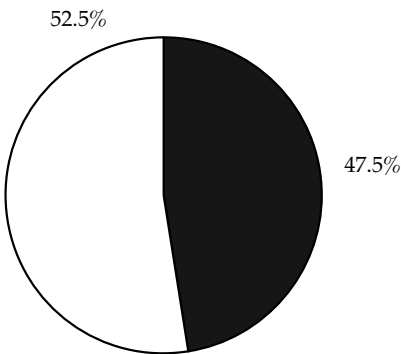
- ☐ White
- ☐ Black
- ☐ Hispanic
- ☐ Asian/Pacific Islander
- ☐ Other

Figure 13-1d **Ages 19-21 (N=221)**



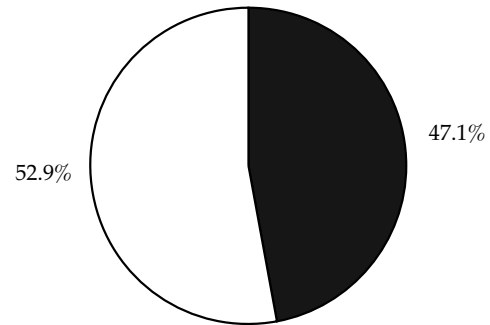
Race/Ethnicity

Figure 13-1b



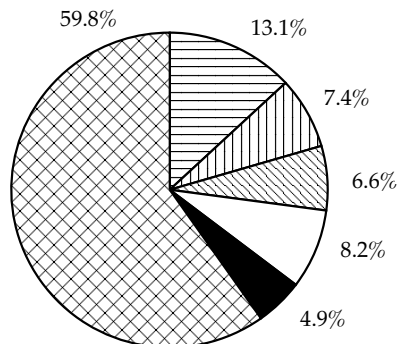
- ☐ Female
- ☐ Male

Figure 13-1e



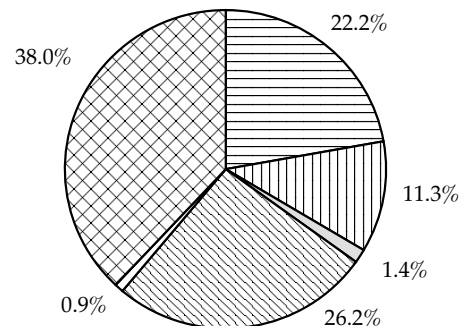
Gender

Figure 13-1c



- ☐ Men Who Have Sex With Men
- ☐ Injecting Drug Users
- ☐ Men Who Have Sex With Men and Inject Drugs
- ☐ Heterosexual Contact
- ☐ Hemophilia/Coagulation Disorder
- ☐ Transfusion/Tissue Recipient
- ☐ Undetermined

Figure 13-1f



Exposure Category

Figure 13-2

# AIDS Cases Among Adolescents Ages 13 - 21 Diagnosed 1994 - 1997 by Exposure Category, Year of Diagnosis, Gender, Race/Ethnicity, Age at Diagnosis and Residence

New York State, Cases Confirmed through April 1998

	Men Who Have Sex With Men <sup>†</sup>				Injection Drug Users <sup>†</sup>				Heterosexual Contact			
	1994	1995	1996*	1997*	1994	1995	1996*	1997*	1994	1995	1996*	1997*
<b>Gender</b>												
Male	22	16	16	11	10	4	4	2	2	1	1	2
Female	0	0	0	0	4	4	3	3	21	20	13	6
<b>Race/Ethnicity</b>												
White	2	3	0	1	0	2	0	0	3	5	0	2
Black	11	7	7	7	4	4	3	3	16	9	5	6
Hispanic	9	6	9	3	10	2	4	2	4	7	7	0
Asian/Pacific Islander	0	0	0	0	0	0	0	0	0	0	2	0
<b>Age at Diagnosis</b>												
13-18	4	4	5	3	4	2	2	1	5	1	0	2
19-21	18	12	11	8	10	6	5	4	18	20	14	6
<b>Residence</b>												
Bronx	2	3	1	1	4	0	1	1	4	4	6	1
Brooklyn	5	6	3	3	7	1	1	2	7	5	3	1
Manhattan	9	3	6	2	2	1	4	1	7	2	2	0
Queens	2	1	2	1	0	3	1	1	1	3	1	1
Staten Island	0	0	0	0	0	0	0	0	1	0	0	0
Rest of State	4	3	4	4	1	3	0	0	3	7	2	5
<b>Total</b>	<b>22</b>	<b>16</b>	<b>16</b>	<b>11</b>	<b>14</b>	<b>8</b>	<b>7</b>	<b>5</b>	<b>23</b>	<b>21</b>	<b>14</b>	<b>8</b>

\* Data for 1996 and 1997 are incomplete due to lag in case reporting and time required for case confirmation.

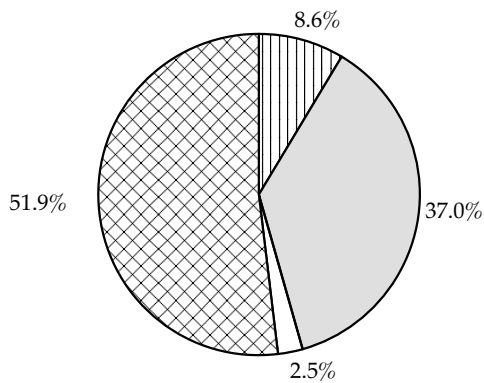
† Excludes three adolescents with dual risk of male-to-male sex and injection drug use.

Figure 13-3

# AIDS Cases Among Adolescents Ages 13-21 Diagnosed 1994 - 1997 by Gender, Exposure Category and Race/Ethnicity

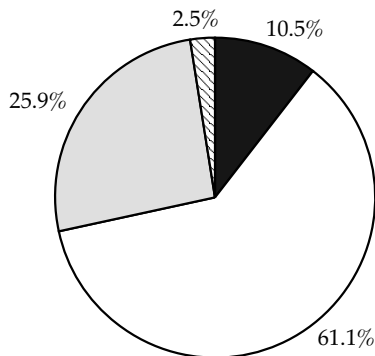
New York State, Cases Confirmed through April 1998

Figure 13-3a **Female (N=162)**



**Exposure Category**

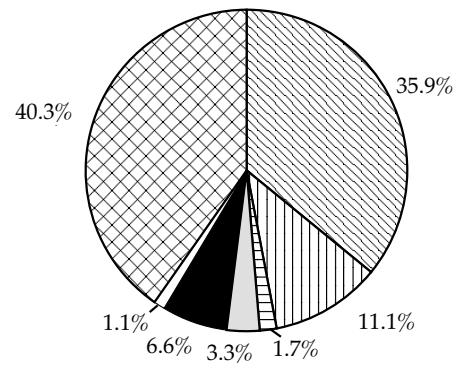
Figure 13-3b



**Race/Ethnicity**

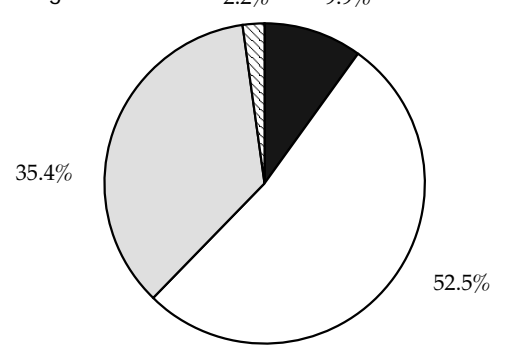
Asian/Pacific Islander – 1.3%  
Unknown – 1.2%

Figure 13-3c **Male (N=181)**



**Exposure Category**

Figure 13-3d



**Race/Ethnicity**

Asian/Pacific Islander – 0.6%  
Native American/Alaskan Native – 0.6%  
Unknown – 1.0%



Figure 13-4

# AIDS Incidence Among Adolescents Ages 13 - 21 by Exposure Category, Race/Ethnicity and Year of Diagnosis New York State, Cases Confirmed through April 1998

Figure 13-4a **Exposure Category**

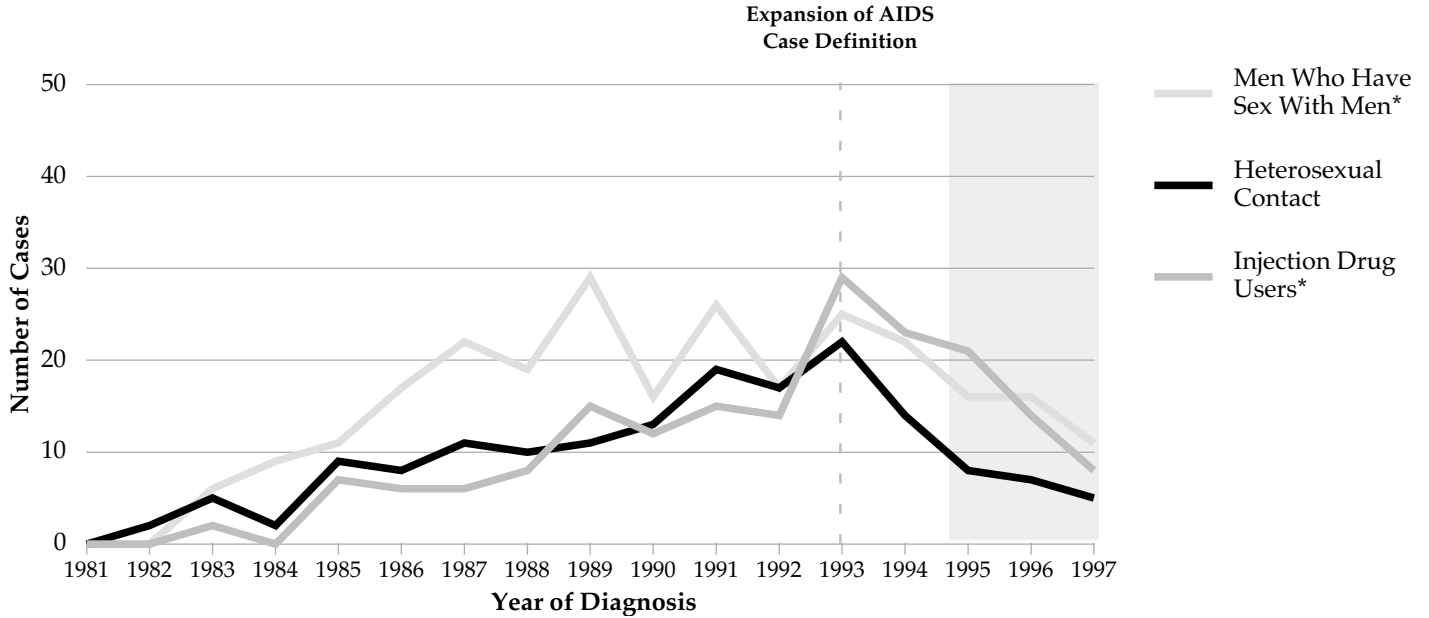
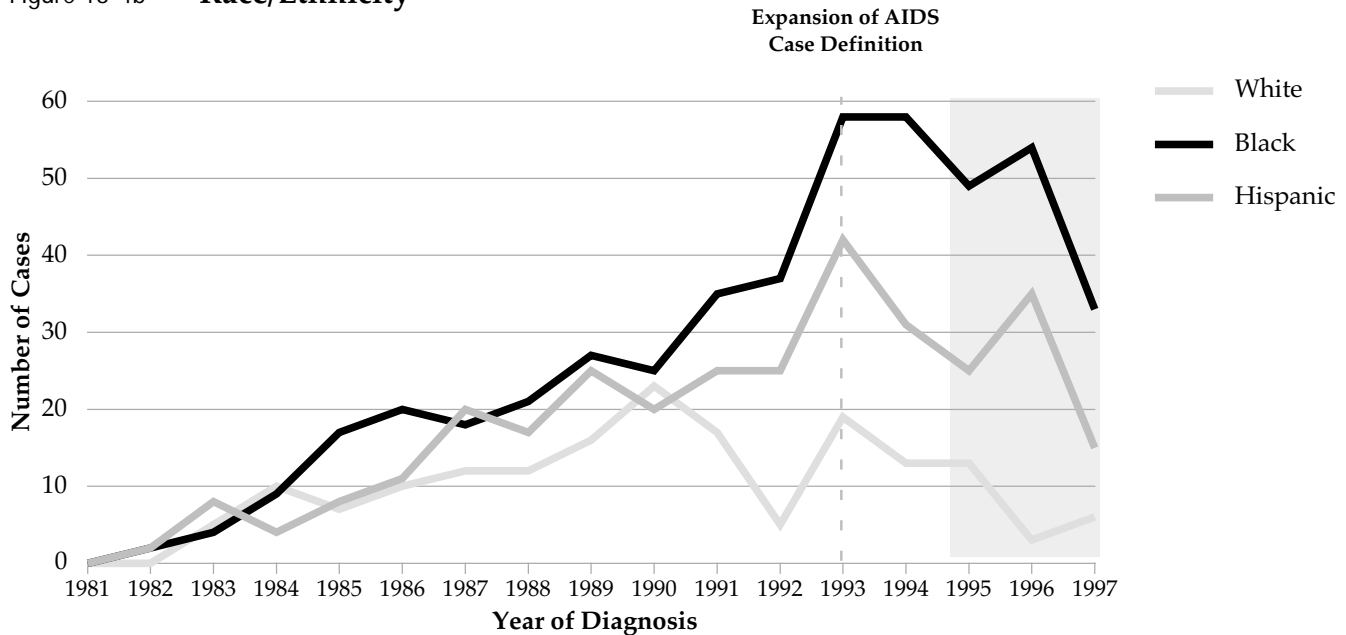


Figure 13-4b **Race/Ethnicity**



On January 1, 1993, the AIDS Surveillance Case Definition for adults with HIV infection was expanded to include pulmonary tuberculosis, recurrent pneumonia, invasive cervical cancer and severe immunodeficiency (see page 57). Data for 1996 and 1997 are incomplete due to lag in case reporting and time required for case confirmation.

\* Excludes adolescents with the dual risk of male-to-male sex and injection drug use.

## AIDS Among New York State Adults

As of the end of 1997, approximately 46,000 New Yorkers throughout the state were living with AIDS (see Figure 14-1). More than 36,000 were New York City residents, and more than 40 percent were injection drug users. One-fourth of those living with AIDS in New York State were women, and just over 700 were children under the age of 13.

### AIDS Among Women

AIDS cases among New York State women accounted for more than 26 percent of all U.S. cases among women (see Figure 9-3). (For comparison, AIDS cases among New York State men accounted for 17.7% of U.S. cases among men.) Adolescent and adult women accounted for 29.6 percent of adult AIDS cases diagnosed in New York State in 1997 (see Figure 15-1), compared to 19.7 percent in 1990 and 10.3 percent in 1985. Thirty-four percent of New York State cases diagnosed in 1997 among adolescent and adult women were attributed to injecting drug use (see Figure 14-3), and 29.1 percent to sexual contact with an

infected man, many of whom were themselves infected through use of injecting drugs. HIV exposure category was not determined for more than one-third of cases diagnosed among women in 1997. More than 87 percent of AIDS cases diagnosed among women in 1997 were women of color (black, 58.9%, Hispanic, 28.6%, Asian/Pacific Islander, 0.2%) (see Figure 14-3).

### AIDS Among Men

Injecting drug use continued to be the most frequently reported HIV exposure category among New York State men, accounting for 35.5 percent of cases diagnosed in 1997 (see Figure 14-5). Male-to-male sex accounted for 24.4 percent of cases, and the dual risk of male-to-male sex and injection drug use accounted for 2.2 percent (see Figure 14-5). Heterosexual HIV exposure was reported by increasing proportions of men diagnosed with AIDS, accounting for 5.8 percent of cases diagnosed in 1997 (see Figure 14-5), compared to 0.9 percent in 1989-1991 and 0.2 percent in 1984-1986.

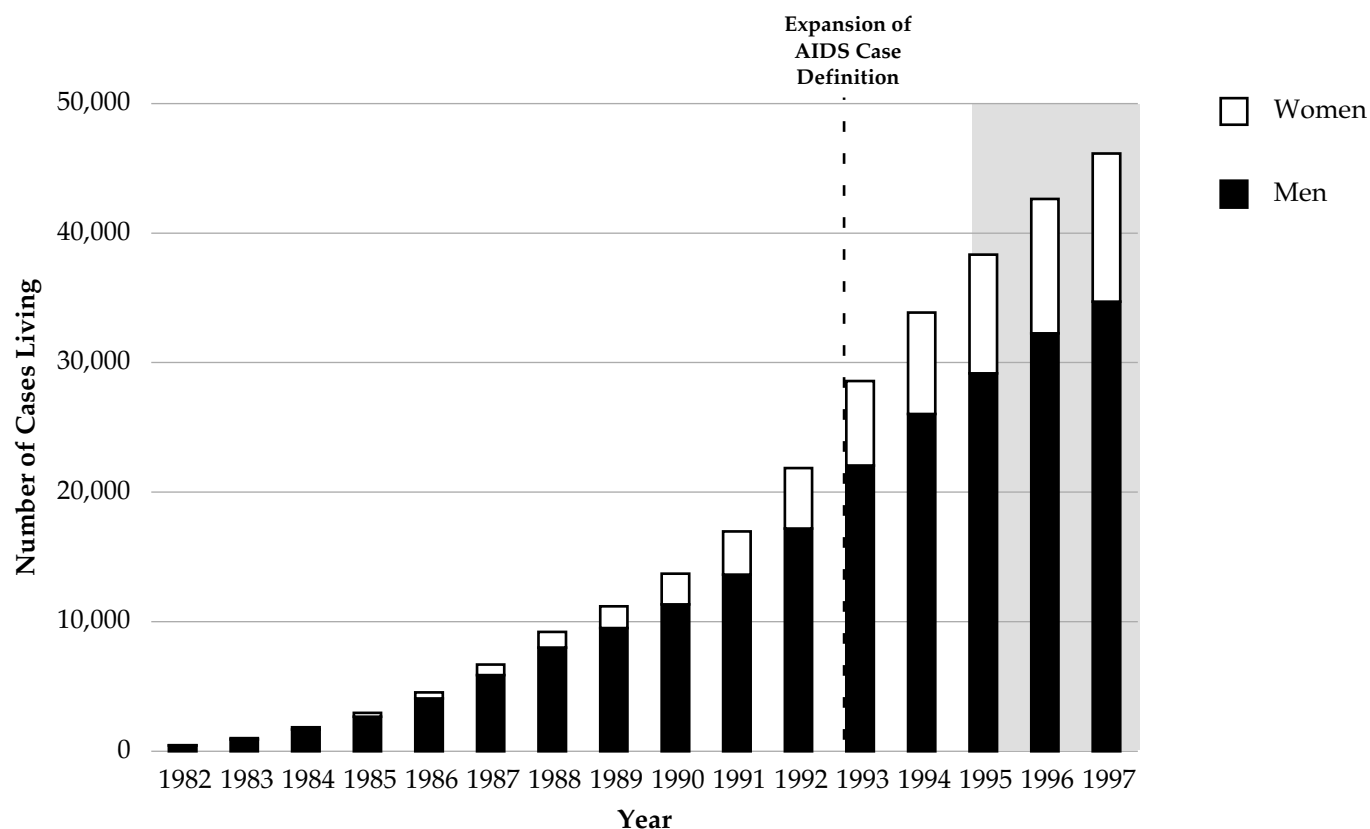
### Diagnoses Associated with AIDS

*Pneumocystis carinii* pneumonia (PCP) continued to be the single most frequently reported AIDS-defining opportunistic infection among both pediatric and adult cases and for all major HIV exposure categories. However, the proportion of AIDS cases reporting opportunistic infection has declined considerably with the addition of severe immunodeficiency as an AIDS-defining condition, and more recently with the advent of combination antiretroviral therapies including protease inhibitors. Severe immunodeficiency, added to the AIDS case definition in 1993, quickly became the leading AIDS-defining condition. More than 41,000 cases have been diagnosed under this criterion through 1997 and the condition accounted for more than 75 percent of adult AIDS diagnoses in 1997. Since the AIDS case definition expansion in January 1993, pulmonary tuberculosis has been reported as an initial AIDS-defining illness in 9,935 cases, recurrent pneumonia in 1,658 and invasive cervical cancer in 148.

Figure 14-1

## AIDS Prevalence: Number of Adults Alive with AIDS at the End of Each Year, by Sex

New York State, Cases Confirmed through April 1998



On January 1, 1993, the AIDS Surveillance Case Definition for adults with HIV infection was expanded to include pulmonary tuberculosis, recurrent pneumonia, invasive cervical cancer and severe immunodeficiency (see page 57). Data for 1996 and 1997 are incomplete due to lag in case reporting and time required for case confirmation.

Figure 14-2

# Adults Living With AIDS by Race/Ethnicity, Age at Diagnosis, Gender, Exposure Category and Region

New York State, Cases Confirmed through April 1998

	New York State									New York City				
	Males					Females				Males				
	Men Who Have Sex With Men	Injecting Drug Users	Men Who Have Sex With Men and Inject Drugs	Blood Products	Heterosexual Contact	Injecting Drug Users	Blood Products	Heterosexual Contact		Men Who Have Sex With Men	Injecting Drug Users	Men Who Have Sex With Men and Inject Drugs	Blood Products	Heterosexual Contact
<b>Race/Age at Diagnosis*</b>														
White														
13-19	3	0	0	18	1	2	1	4		2	0	0	6	0
20-24	84	21	6	9	1	25	0	38		51	12	4	1	1
25-29	646	139	41	20	11	124	5	100		453	92	22	3	6
30-39	2,712	1,005	152	17	63	491	8	245		2,066	643	72	9	34
40-49	1,728	792	97	12	37	250	11	140		1,378	539	50	4	19
50-59	510	130	16	10	18	29	5	31		403	98	14	3	9
>59	153	16	1	7	7	2	5	12		120	14	1	4	5
Black														
13-19	18	6	1	2	1	9	5	17		15	5	1	2	1
20-24	127	43	5	3	20	53	0	105		105	34	3	2	15
25-29	484	234	42	7	62	221	8	304		382	181	29	7	55
30-39	1,320	2,131	188	17	287	1,249	25	826		1,074	1,567	112	11	223
40-49	635	2,872	117	14	176	930	27	347		539	2,246	80	9	143
50-59	223	639	41	3	64	146	8	122		193	523	28	2	49
>59	48	111	2	3	27	22	3	39		43	97	2	3	21
Hispanic														
13-19	10	5	0	3	0	6	2	12		8	5	0	1	0
20-24	111	86	8	3	10	65	0	74		99	72	6	3	7
25-29	481	454	38	2	62	227	1	219		438	340	34	1	49
30-39	1,173	2,581	143	10	170	888	10	554		1,091	2,069	106	8	132
40-49	584	1,886	53	6	120	421	4	309		530	1,611	45	6	107
50-59	186	369	10	2	45	44	4	106		176	326	7	1	41
>59	45	52	0	6	8	5	0	16		5,942	49	0	6	8
Asian/Pacific Islander														
13-19	0	0	0	0	0	0	0	0		0	0	0	0	0
20-24	2	0	0	1	1	0	0	2		1	0	0	1	1
25-29	11	3	0	0	2	0	0	4		10	3	0	0	2
30-39	55	4	2	1	7	2	0	6		53	2	1	0	6
40-49	51	11	0	1	2	2	2	4		49	11	0	0	2
50-59	13	2	0	0	1	0	0	1		12	2	0	0	1
>59	1	1	0	0	1	0	0	1		1	1	0	0	1
Native American/Alaskan Native														
13-19	0	0	0	0	0	0	0	0		0	0	0	0	0
20-24	1	0	0	0	0	0	0	0		1	0	0	0	0
25-29	0	1	0	0	0	0	0	0		0	1	0	0	0
30-39	4	2	2	0	2	1	0	1		0	0	1	0	2
40-49	1	3	0	0	0	0	0	0		1	1	0	0	0
50-59	0	1	0	0	0	0	0	0		0	1	0	0	0
>59	0	0	0	0	0	0	0	0		0	0	0	0	0
<b>Total</b>	<b>11,420</b>	<b>13,600</b>	<b>965</b>	<b>177</b>	<b>1,206</b>	<b>5,214</b>	<b>134</b>	<b>3,639</b>		<b>9,336</b>	<b>10,545</b>	<b>618</b>	<b>93</b>	<b>940</b>

Adults Living With AIDS by Race/Ethnicity, Age at Diagnosis, Gender, Exposure Category and Region (continued)

New York City				Rest of State							
Females				Males					Females		
Injecting Drug Users	Blood Products	Heterosexual Contact		Men Who Have Sex With Men	Injecting Drug Users	Men Who Have Sex With Men and Inject Drugs	Blood Products	Heterosexual Contact	Injecting Drug Users	Blood Products	Heterosexual Contact
Race/Age at Diagnosis*											
White											
13-19	2	1	0	1	0	0	12	1	0	0	4
20-24	18	0	19	33	9	2	8	0	7	0	19
25-29	81	1	46	193	47	19	17	5	43	4	54
30-39	319	3	122	646	362	80	8	29	172	5	123
40-49	170	5	75	350	253	47	8	18	80	6	65
50-59	24	5	15	107	32	2	7	9	5	0	16
>59	1	3	5	33	2	0	3	2	1	2	7
Black											
13-19	8	2	14	3	1	0	0	0	1	3	3
20-24	42	0	78	22	9	2	1	5	11	0	27
25-29	189	3	236	102	53	13	0	7	32	5	68
30-39	973	19	653	246	564	76	6	64	276	6	173
40-49	793	21	270	96	626	37	5	33	137	6	77
50-59	131	8	98	30	116	13	1	15	15	0	24
>59	21	3	29	5	14	0	0	6	1	0	10
Hispanic											
13-19	6	2	9	2	0	0	2	0	0	0	3
20-24	60	0	62	12	14	2	0	3	5	0	12
25-29	199	1	189	43	114	4	1	13	28	0	30
30-39	801	10	492	82	512	37	2	38	87	0	62
40-49	383	4	289	54	275	8	0	13	38	0	20
50-59	40	4	101	10	43	3	1	4	4	0	5
>59	5	0	14	3	3	0	0	0	0	0	2
Asian/Pacific Islander											
13-19	0	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	1	0	0	0	0	0	0	2
25-29	0	0	3	1	0	0	0	0	0	0	1
30-39	1	0	6	2	2	1	1	1	1	0	0
40-49	2	2	4	2	0	0	1	0	0	0	0
50-59	0	0	1	1	0	0	0	0	0	0	0
>59	0	0	1	0	0	0	0	0	0	0	0
Native American/Alaskan Native											
13-19	0	0	0	0	0	0	0	0	0	0	0
20-24	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0	0
30-39	0	0	1	4	2	1	0	0	1	0	0
40-49	0	0	0	0	2	0	0	0	0	0	0
50-59	0	0	0	0	0	0	0	0	0	0	0
>59	0	0	0	0	0	0	0	0	0	0	0
Total	4,269	97	2,832	2,084	3,055	347	84	266	945	37	807

\* Excludes 90 adults with unknown race/ethnicity.

Figure 14-3

# Adult Female AIDS Cases Diagnosed in 1997 by Race/Ethnicity and Exposure Category, and Cumulative Female Cases by Year of Diagnosis\* New York State, Cases Confirmed through April 1998

Figure 14-3a

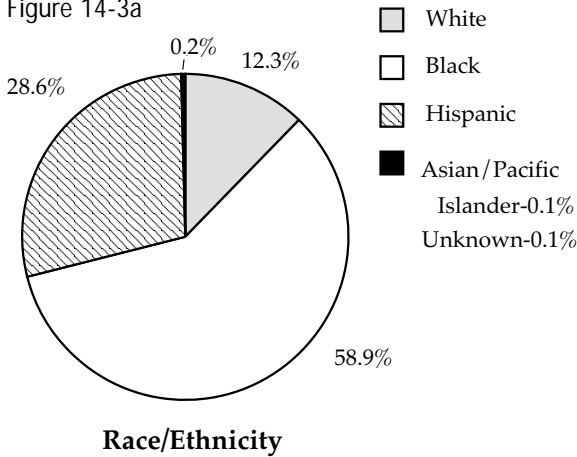


Figure 14-3b

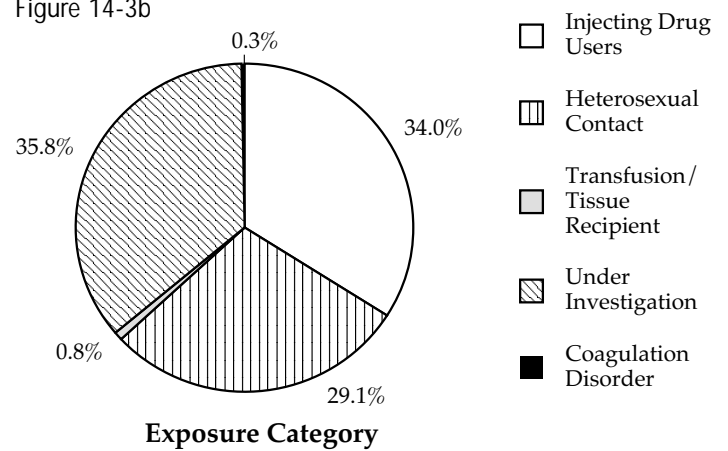
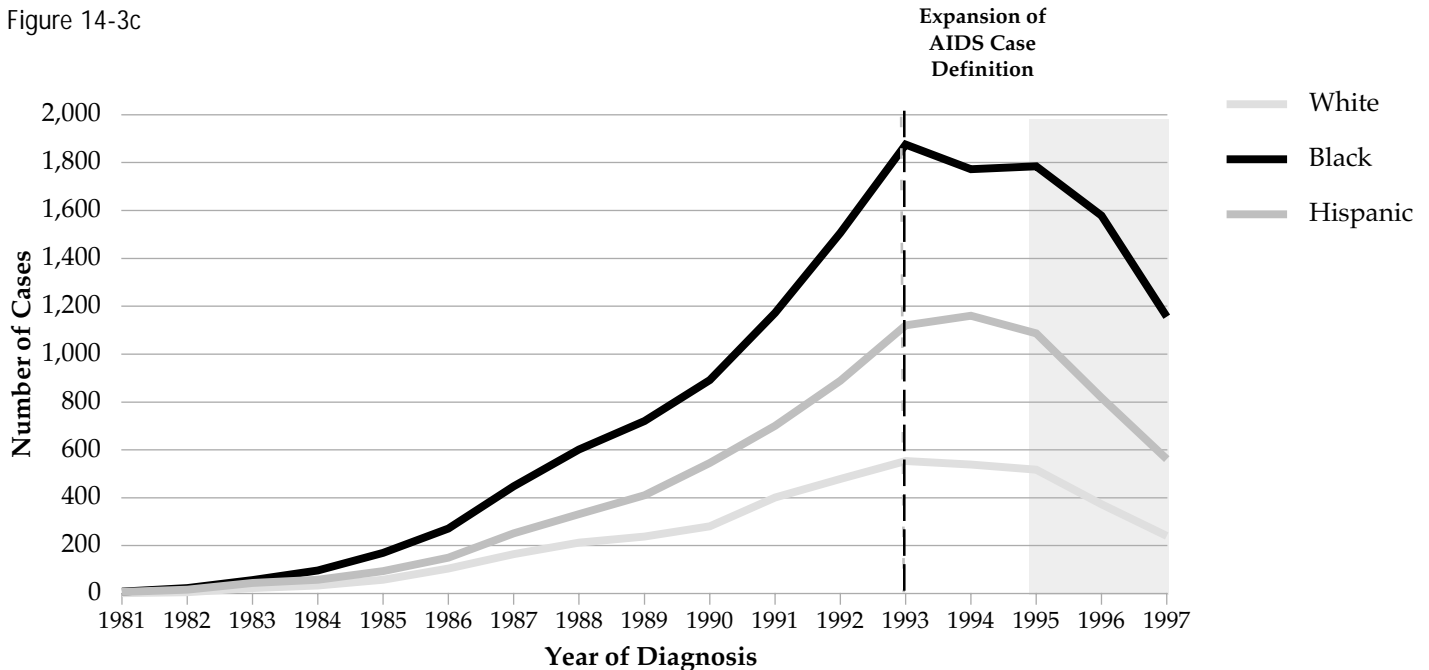


Figure 14-3c



On January 1, 1993, the AIDS Surveillance Case Definition for adults with HIV infection was expanded to include pulmonary tuberculosis, recurrent pneumonia, invasive cervical cancer and severe immunodeficiency (see page 57). Data for 1996 and 1997 are incomplete due to lag in case reporting and time required for case confirmation.

\* Due to small case numbers, Asian/Pacific Islanders and Native American/Alaskan Natives are not presented by year of diagnosis.

Figure 14-4

**Adult Female AIDS Cases Diagnosed 1994 - 1997 by Race/Ethnicity,  
Year of Diagnosis, Exposure Category, Age at Diagnosis and Residence\***  
New York State, Cases Confirmed through April 1998

	White				Black				Hispanic				Asian/ Pacific Islander			
	1994	1995	1996†	1997†	1994	1995	1996†	1997†	1994	1995	1996†	1997†	1994	1995	1996†	1997†
<b>Exposure Category</b>																
Injection Drug Users	278	255	177	100	907	807	595	377	590	469	317	190	0	0	2	0
Heterosexual Contact	187	169	108	83	576	537	465	296	449	416	299	191	4	7	5	2
Coagulation Disorder	3	1	0	1	8	10	6	4	5	4	4	0	0	1	0	0
Transfusion/Tissue																
Recipient	6	1	10	0	9	11	16	13	3	3	0	2	0	0	1	0
Undetermined	65	92	78	57	272	420	497	466	114	195	198	178	2	4	7	1
<b>Age at Diagnosis</b>																
13-19	3	2	2	2	16	9	16	12	5	6	7	4	1	0	0	0
20-24	14	21	13	8	60	51	41	45	43	47	31	15	0	0	3	0
25-29	66	64	40	25	204	191	166	102	155	143	94	61	1	2	0	0
30-39	264	244	166	112	799	797	683	492	550	525	390	257	2	5	4	2
40-49	151	156	115	68	542	584	508	384	303	272	231	163	1	4	6	0
50-59	27	21	28	17	115	119	122	93	79	71	53	51	0	1	1	0
>59	14	10	9	9	36	34	43	28	26	23	12	10	1	0	1	1
<b>Residence</b>																
Bronx	30	41	31	20	306	283	303	248	387	388	303	236	0	1	0	0
Brooklyn	101	80	45	36	622	584	503	322	286	267	177	102	1	3	5	0
Manhattan	91	80	54	42	321	361	291	230	256	227	165	114	2	2	6	3
Queens	94	93	56	23	207	217	193	140	113	94	81	53	2	6	2	0
Staten Island	16	23	18	12	29	41	17	15	14	10	12	6	0	0	0	0
Borough Unknown	0	0	0	0	0	0	3	0	0	0	0	3	0	0	0	0
Rest of State	207	201	169	108	287	299	269	201	105	101	80	47	1	0	2	0
<b>Total</b>	<b>539</b>	<b>518</b>	<b>373</b>	<b>241</b>	<b>1,772</b>	<b>1,785</b>	<b>1,579</b>	<b>1,156</b>	<b>1,161</b>	<b>1,087</b>	<b>818</b>	<b>561</b>	<b>6</b>	<b>12</b>	<b>15</b>	<b>3</b>

\* Four Native American/Alaskan Native women were diagnosed with AIDS in this period.

† Data for 1996 and 1997 are incomplete due to lag in case reporting and time required for case confirmation.

Figure 14-5

# Adult Male AIDS Cases Diagnosed in 1997 by Race/Ethnicity and Exposure Category, and Cumulative Cases by Year of Diagnosis\*

New York State, Cases Confirmed through April 1998

Figure 14-5a

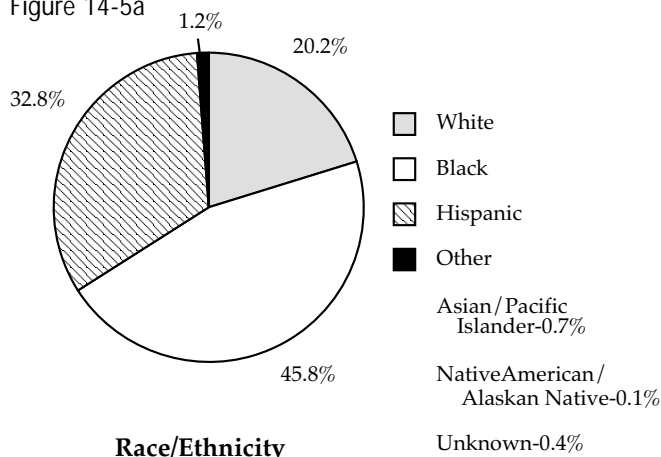


Figure 14-5b

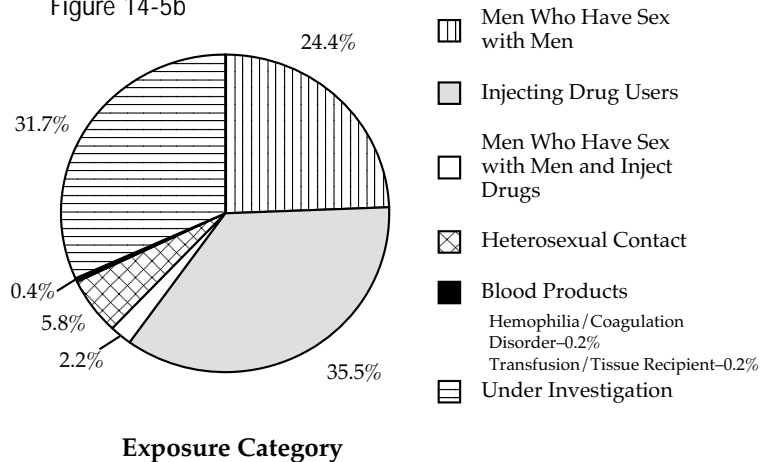
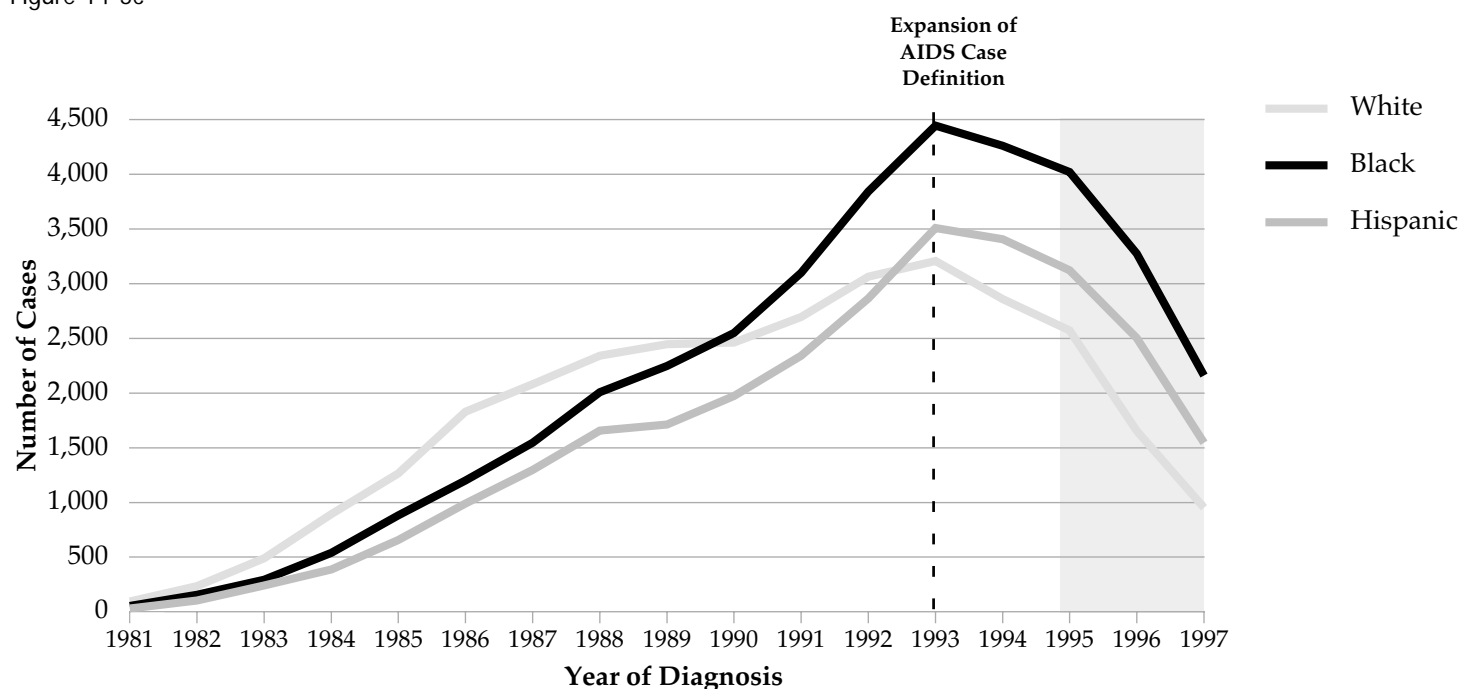


Figure 14-5c



On January 1, 1993, the AIDS Surveillance Case Definition for adults with HIV infection was expanded to include pulmonary tuberculosis, recurrent pneumonia, invasive cervical cancer and severe immunodeficiency (see page 57). Data for 1996 and 1997 are incomplete due to lag in case reporting and time required case confirmation.

\* Due to small case numbers, Asian/Pacific Islanders and Native American/Alaskan Natives are not presented by year of diagnosis.



Figure 14-6

Adult Male AIDS Cases Diagnosed in 1994 - 1997 by Race/Ethnicity,  
Exposure Category, Year of Diagnosis, Age at Diagnosis and Residence  
New York State, Cases Confirmed through April 1998

	White				Black				Hispanic				Asian/Pacific Islander				Native American/ Alaskan Native	
	1994	1995	1996*	1997*	1994	1995	1996*	1997*	1994	1995	1996*	1997*	1994	1995	1996*	1997*	1994-95	1996-97*
<b>Exposure Category</b>																		
Men Who Have Sex																		
With Men	1,807	1,487	886	491	1,013	811	618	357	838	663	459	285	34	30	22	9	7	1
Injecting Drug Users	639	622	365	226	2,222	1,795	1,291	801	1,884	1,545	1,094	638	6	6	5	4	2	2
Men Who Have Sex																		
With Men and																		
Inject Drugs	88	83	50	23	95	105	69	54	85	57	38	25	1	1	1	0	0	1
Heterosexual Contact	41	33	48	25	191	208	196	158	119	150	127	86	6	5	3	2	1	1
Hemophilia/ Coagulation Disorder	27	14	9	3	10	11	7	4	9	3	2	1	0	0	0	0	0	0
Transfusion/Tissue Recipient	9	6	6	2	5	8	6	5	2	5	6	4	0	1	0	0	0	0
Undetermined	250	329	290	181	726	1,083	1,089	780	470	699	778	506	18	25	42	19	7	0
<b>Age at Diagnosis</b>																		
13-19	6	4	0	2	13	17	17	6	9	5	9	7	0	0	0	0	0	0
20-24	22	31	12	4	64	51	41	34	63	59	48	19	2	2	2	0	2	0
25-29	211	192	93	58	347	265	213	140	343	278	228	122	4	6	3	4	2	0
30-39	1,274	1,111	664	368	1,584	1,484	1,193	740	1,582	1,368	1,078	655	28	28	36	9	9	3
40-49	936	884	622	355	1,602	1,609	1,282	821	1,069	1,043	847	539	24	18	20	13	4	2
50-59	310	265	198	139	476	442	412	313	264	281	232	165	4	12	6	7	0	0
>59	102	87	65	25	176	153	118	105	77	88	62	38	3	2	6	1	0	0
<b>Residence</b>																		
Bronx	99	105	76	48	588	569	484	383	881	823	648	483	4	2	2	4	3	0
Brooklyn	299	270	164	104	1,220	1,118	889	560	609	552	413	245	10	8	12	7	2	0
Manhattan	1,252	1,026	616	339	1,016	929	750	504	878	801	647	330	27	28	23	7	2	1
Queens	317	298	189	122	510	446	346	229	454	382	296	189	16	24	28	14	3	1
Staten Island	93	78	59	31	93	60	50	32	47	38	28	15	2	1	1	1	0	0
Borough Unknown	6	7	6	6	10	3	5	1	5	2	2	4	0	0	0	0	0	0
Rest of State	795	790	544	301	825	896	752	450	533	524	470	279	6	5	7	1	7	3
<b>Total</b>	<b>2,861</b>	<b>2,574</b>	<b>1,654</b>	<b>951</b>	<b>4,262</b>	<b>4,021</b>	<b>3,276</b>	<b>2,159</b>	<b>3,407</b>	<b>3,122</b>	<b>2,504</b>	<b>1,545</b>	<b>65</b>	<b>68</b>	<b>73</b>	<b>34</b>	<b>17</b>	<b>5</b>

\* Data for 1996 and 1997 are incomplete due to lag in case reporting and time required for case confirmation.

Figure 14-7

# AIDS Cases Diagnosed in 1994 - 1997 Among People Aged 55 and Older by Exposure Category, Year of Diagnosis, Gender, Race/Ethnicity, Age at Diagnosis and Residence

New York State, Cases Confirmed through April 1998

	Men Who Have Sex With Men <sup>†</sup>				Injection Drug Users <sup>†</sup>				Heterosexual Contact			
	1994	1995	1996*	1997*	1994	1995	1996*	1997*	1994	1995	1996*	1997*
<b>Gender</b>												
Male	289	209	136	81	226	200	148	104	46	48	37	30
Female	0	0	0	0	39	30	32	14	73	48	45	42
<b>Race/Ethnicity<sup>‡</sup></b>												
White	157	109	78	36	28	21	19	7	14	13	10	9
Black	69	59	30	30	176	140	124	69	52	37	48	44
Hispanic	63	38	26	13	61	69	36	41	51	45	23	18
Asian/Pacific Islander	0	3	2	2	0	0	1	0	2	0	1	1
Unknown	0	0	0	0	0	0	0	1	0	1	0	0
<b>Age at Diagnosis</b>												
55-59	165	112	72	46	143	132	114	78	54	54	38	42
60-64	88	66	38	12	79	66	39	20	34	20	22	16
65-69	25	24	18	18	27	26	19	14	19	14	10	6
70-74	9	5	8	4	14	3	7	3	8	6	9	7
75-79	1	2	0	1	1	3	1	1	4	2	1	1
80+	1	0	0	0	1	0	0	2	0	0	2	0
<b>Residence</b>												
Bronx	26	22	6	7	50	42	38	37	26	17	15	16
Brooklyn	40	27	16	8	61	56	32	19	35	29	22	15
Manhattan	143	107	73	44	102	70	60	37	25	21	15	26
Queens	36	19	10	8	21	21	18	9	10	6	16	4
Staten Island	4	2	3	1	7	8	5	3	1	2	0	0
Borough Unknown	1	0	0	0	0	0	0	0	0	1	0	0
Rest of State	39	32	28	13	24	33	27	13	22	20	14	11
<b>Total</b>	<b>289</b>	<b>209</b>	<b>136</b>	<b>81</b>	<b>265</b>	<b>230</b>	<b>180</b>	<b>118</b>	<b>119</b>	<b>96</b>	<b>82</b>	<b>72</b>

\* Data for 1996 and 1997 are incomplete due to lag in case reporting and time required for case confirmation.

<sup>†</sup> Excludes 21 individuals with dual risk of male-to-male sex and injection drug use.

<sup>‡</sup> No cases were diagnosed among Native American/Alaskan Natives aged 55 and older in this period.

# HIV Transmission Categories and Subpopulations

## Men Who Have Sex with Men (MSM)

More than 38,000 AIDS cases have been confirmed to date among MSM; 83 percent of these were residents of New York City at the time of diagnosis (see Figure 15-2). Although the majority of MSM cases have been among white men, the proportion of cases among MSM of color has been increasing over time (see Figures 15-2 and 15-3). In New York City since 1991, at least half of all new AIDS diagnoses in MSM were among blacks and Hispanics. In the rest of the state, whites continued to account for almost 60 percent of cases among MSM.

## Injecting Drug Users

Thirty-five percent of adult AIDS cases diagnosed in New York State in 1997 were attributed to personal use of injecting drugs (see Figure 15-1). Injecting drug use accounted for 35.5 percent of all new cases among blacks, 39.3 percent of new cases among Hispanics and 34.0 percent of new cases among women.

Of all cases diagnosed from 1994 to 1997, more than 40 percent were directly attributed to injecting drug use, including 18,237 cases in IDUs and 776 in MSM/IDUs. HIV transmission attributed to heterosexual contact with an individual with a history of injecting drug use accounted for an additional 1,454 AIDS cases (see Figure 15-5). Nearly 40 percent of pediatric AIDS cases diagnosed in New York State

since 1994 resulted from perinatal transmission of HIV from a woman with a history of injecting drug use (30.3%) (see Figure 12-1), or who reported sexual contact with an IDU (8.0%).

## Heterosexually Exposed Individuals

Heterosexual HIV transmission accounted for 12.6 percent of AIDS cases diagnosed in 1997 (see Figure 15-1). To date, 10,292 AIDS cases in New York State have been attributed to heterosexual transmission; 5,200 (50.5%) of these have been diagnosed in the last four years. Male cases have been increasing steadily as a proportion of heterosexually acquired AIDS cases, accounting for nearly one-third of those diagnosed in 1997.

Of heterosexually acquired cases diagnosed in the last four years (1994-1997) (see Figure 15-5), 27.9 percent were attributed to sexual contact with an IDU, and 2.7 percent were attributed to heterosexual contact with a bisexual man. For 68.6 percent, the HIV risk of the infected partner was either not known or not reported. Many of these cases may be heterosexual partners of IDUs whose risk was not known to the partner or not reported to the AIDS registry. Heterosexually acquired AIDS may also account for a large proportion of AIDS cases with an undetermined HIV exposure, based on the stringent AIDS surveillance criteria for individuals who are not homosexual males or IDUs.

According to CDC guidelines, an individual with AIDS for whom all but heterosexual HIV risk has been ruled out can be classified as heterosexually exposed only if he or she knows the partner's risk and/or HIV status. In the absence of such information, the case is classified as having an undetermined exposure category. In contrast, MSM and IDUs need only be behaviorally identified in one of these groups, with no additional documentation required. As a result of these rigorous standards for identifying heterosexually exposed individuals, it is likely that many heterosexually exposed cases fail to meet these standards.

Thus, a proportion of cases with an undetermined exposure category may be heterosexually exposed individuals, particularly among subpopulations in which heterosexual exposure is already a leading category.

## Blood Product Recipients

New York State continues to receive reports of new AIDS diagnoses among individuals who received blood and blood products both prior to and after the implementation of HIV antibody screening procedures for donated blood in March 1985. The New York State Department of Health Bureau of HIV/AIDS Epidemiology and the New York City Department of Health Office of AIDS Surveillance continue to monitor such reports to identify actual risk.

## **Individuals for whom Exposure Category is Undetermined**

Individuals with an undetermined mode of exposure may fall into one of several categories: people currently under investigation by public health representatives; people for whom no mode of exposure was identified because the individual died or was lost to follow-up; and people for whom adequate follow-up information revealed no identifiable exposure mechanism. The proportion of AIDS cases reported without an HIV exposure category has increased in recent years, due in part to the increased volume of cases following the 1993 expansion of the AIDS surveillance case definition, the increase of reporting from nonhospital sources (especially lab-based reporting) and the probable increase in heterosexual HIV transmission to individuals whose HIV risk behavior is not easily documented.

HIV exposure category has not been determined for 14,174 adult AIDS cases diagnosed in New York State through 1997 (11.7% of total adult cases) (see Figure 9-3). Included in these are 5,265 cases confirmed in 1997 whose exposure category was not determined by year end and is still under investigation. This category also includes nearly 1,000 cases originally classified as "Born in Pattern II Country." The Pattern II classification presumed heterosexual transmission for individuals born in countries in

which heterosexual exposure is believed to be the predominant route of HIV transmission; this classification was discontinued as an accepted HIV exposure category in 1993. The great majority of the remaining cases now classified as "Undetermined" is among individuals for whom information on HIV exposure is unavailable.

The proportion of cases with undetermined HIV exposure category varies by demographic characteristics. It is lowest among pediatric cases (less than 6% of cases diagnosed in 1994-1997), reflecting the relative ease of determining perinatal HIV exposure. The proportion of cases with an undetermined HIV exposure is highest among the youngest (age 13-19) and oldest (age 60 years and older) adult AIDS cases. Among women, this is particularly apparent and coincides with the age groups that have an elevated risk for HIV exposure via heterosexual contact compared to other age groups, suggesting that a proportion of those with undetermined exposure in the youngest and oldest groups acquired HIV via heterosexual contact.

## **People of Color**

People of color continue to bear an increasingly disproportionate burden of the AIDS epidemic in New York State. Of cases diagnosed in 1997, 81.8 percent were among people of color (black 49.7%, Hispanic 31.5%, Asian/Pacific Islander 0.6% and

Native American/Alaskan Native <0.1%). Information on race/ethnicity was unavailable for 0.3 percent of AIDS cases diagnosed in 1997.

Recent population-based AIDS incidence rates underline the severity of the epidemic among people of color. In 1997, for every 100,000 blacks in New York State, 129.2 were diagnosed with AIDS. Among Hispanics, the rate was 95.4 per 100,000. These rates compare to 9.6 cases per 100,000 whites in the same period. Incidence rates in other races were lower, at 5.5 per 100,000 Asians/Pacific Islanders, and 5.9 per 100,000 for Native Americans/Alaskan Natives. However, these rates vary considerably by New York State Ryan White region (see Figure 10-6a through 10-6l).

People of color accounted for 87.6 percent of AIDS cases diagnosed among women in 1997, 93.9 percent of pediatric cases, 85.9 percent of IDUs diagnosed with AIDS and 87.2 percent of cases acquired through heterosexual contact. Blacks have accounted for the largest proportion of total annual incident cases since 1988 in New York State, while Hispanics have accounted for the second largest proportion since 1991. Fifty-eight AIDS cases have been diagnosed among Native Americans, and 705 among Asian/Pacific Islanders in New York State. The majority of cases among Asian/Pacific Islanders (53.3%) are MSM.

Figure 15-1

# Distribution of AIDS Cases Diagnosed in 1997 by Age at Diagnosis, Race/Ethnicity, Gender and Exposure Category

New York State, Cases Confirmed through April 1998

Figure 15-1a

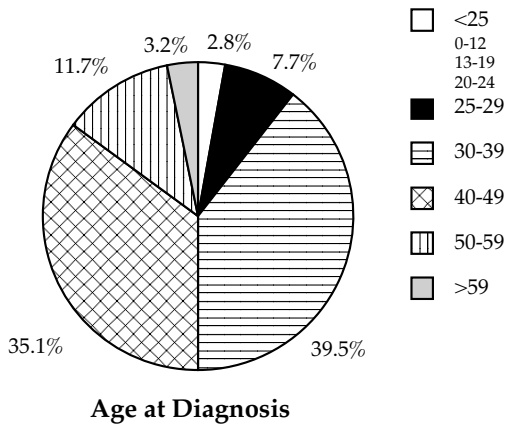


Figure 15-1b

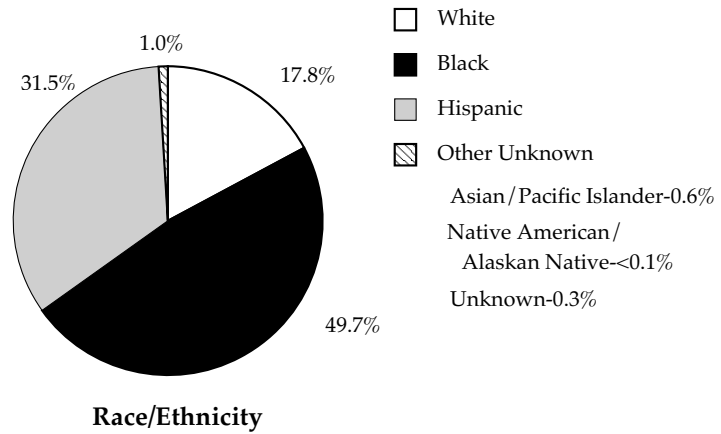


Figure 15-1c

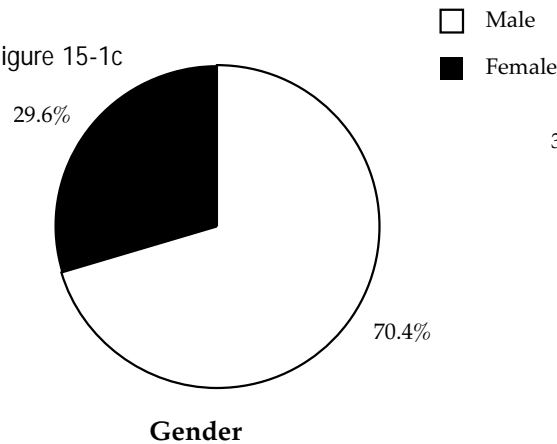


Figure 15-1d

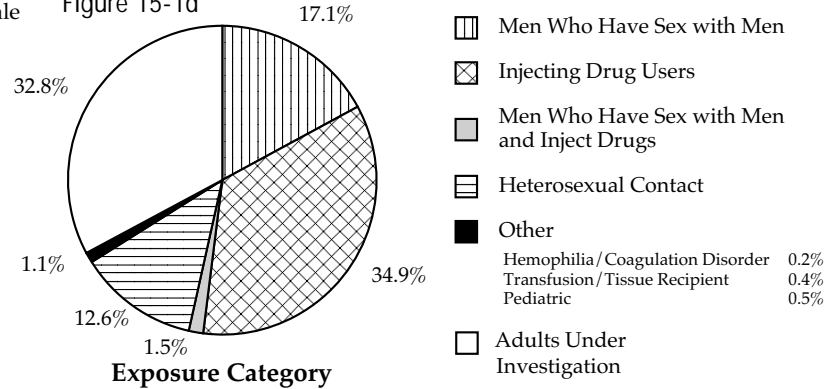


Figure 15-2

# AIDS Incidence Among Men Who Have Sex With Men by Race/Ethnicity, Year of Diagnosis and Region\*

New York State, Cases Confirmed through April 1998

		White		Black		Hispanic		Asian/ Pacific Islander		Native American/ Alaskan Native		Total†
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number
<b>New York City</b>												
Through	81	84	65.6	29	22.7	15	11.7	0	—	0	—	128
	82	180	64.1	61	21.7	40	14.2	0	—	0	—	281
	83	365	65.4	101	18.1	90	16.1	1	0.2	0	—	558
	84	660	66.7	189	19.1	136	13.7	4	0.4	0	—	990
	85	887	62.0	281	19.7	248	17.3	13	0.9	1	0.1	1,430
	86	1,274	63.4	386	19.2	329	16.4	20	1.0	0	—	2,009
	87	1,314	58.7	478	21.3	420	18.8	28	1.3	0	—	2,240
	88	1,341	55.0	564	23.2	496	20.4	30	1.2	0	—	2,436
	89	1,333	54.2	584	23.7	502	20.4	38	1.5	2	0.1	2,461
	90	1,271	51.9	624	25.5	522	21.3	25	1.0	0	—	2,448
	91	1,303	48.4	726	27.0	618	23.0	41	1.5	1	<0.1	2,690
	92	1,381	45.8	869	28.8	721	23.9	41	1.4	1	<0.1	3,018
	93‡	1,457	44.0	967	29.2	852	25.7	34	1.0	2	0.1	3,314
	94	1,367	44.8	852	28.0	793	26.0	32	1.0	1	<0.1	3,048
	95	1,081	45.4	666	28.0	599	25.2	28	1.2	3	0.1	2,380
	96‡	630	40.3	490	31.3	420	26.8	22	1.4	0	—	1,565
	97‡	341	38.2	293	32.8	248	27.8	8	0.9	0	—	892
<b>Total</b>		<b>16,269</b>	<b>51.0</b>	<b>8,160</b>	<b>25.6</b>	<b>7,049</b>	<b>22.1</b>	<b>365</b>	<b>1.1</b>	<b>11</b>	<b>&lt;0.1</b>	<b>31,888</b>
<b>Rest of State</b>												
Through	81	2	100.0	0	—	0	—	0	—	0	—	2
	82	9	90.0	1	10.0	0	—	0	—	0	—	10
	83	34	77.3	6	13.6	4	9.1	0	—	0	—	44
	84	75	80.6	8	8.6	10	10.8	0	—	0	—	93
	85	137	81.5	20	11.9	11	6.5	0	—	0	—	168
	86	208	80.0	39	15.0	11	4.2	2	0.8	0	—	260
	87	291	81.1	53	14.8	11	3.1	2	0.6	1	0.3	359
	88	324	77.7	65	15.6	24	5.8	2	0.5	0	—	417
	89	388	82.0	67	14.2	18	3.8	0	—	0	—	473
	90	411	74.3	102	18.4	37	6.7	1	0.2	0	—	553
	91	464	73.8	113	18.0	46	7.3	4	0.6	1	0.2	629
	92	494	73.3	138	20.5	40	5.9	0	—	2	0.3	674
	93‡	520	69.5	159	21.3	62	8.3	6	0.8	0	—	748
	94	440	67.9	161	24.8	45	6.9	2	0.3	0	—	648
	95	406	65.3	145	23.3	64	10.3	2	0.3	3	0.5	622
	96‡	256	60.1	128	30.0	39	9.2	0	—	0	—	426
	97‡	150	58.6	64	25.0	37	14.5	1	0.4	1	0.4	256
<b>Total</b>		<b>4,609</b>	<b>72.2</b>	<b>1,269</b>	<b>19.9</b>	<b>459</b>	<b>7.2</b>	<b>22</b>	<b>0.3</b>	<b>8</b>	<b>0.1</b>	<b>6,382</b>

\* Excludes 3,781 men with dual risk of male-to-male sex and injection drug use.

† Includes 52 men with unknown race/ethnicity.

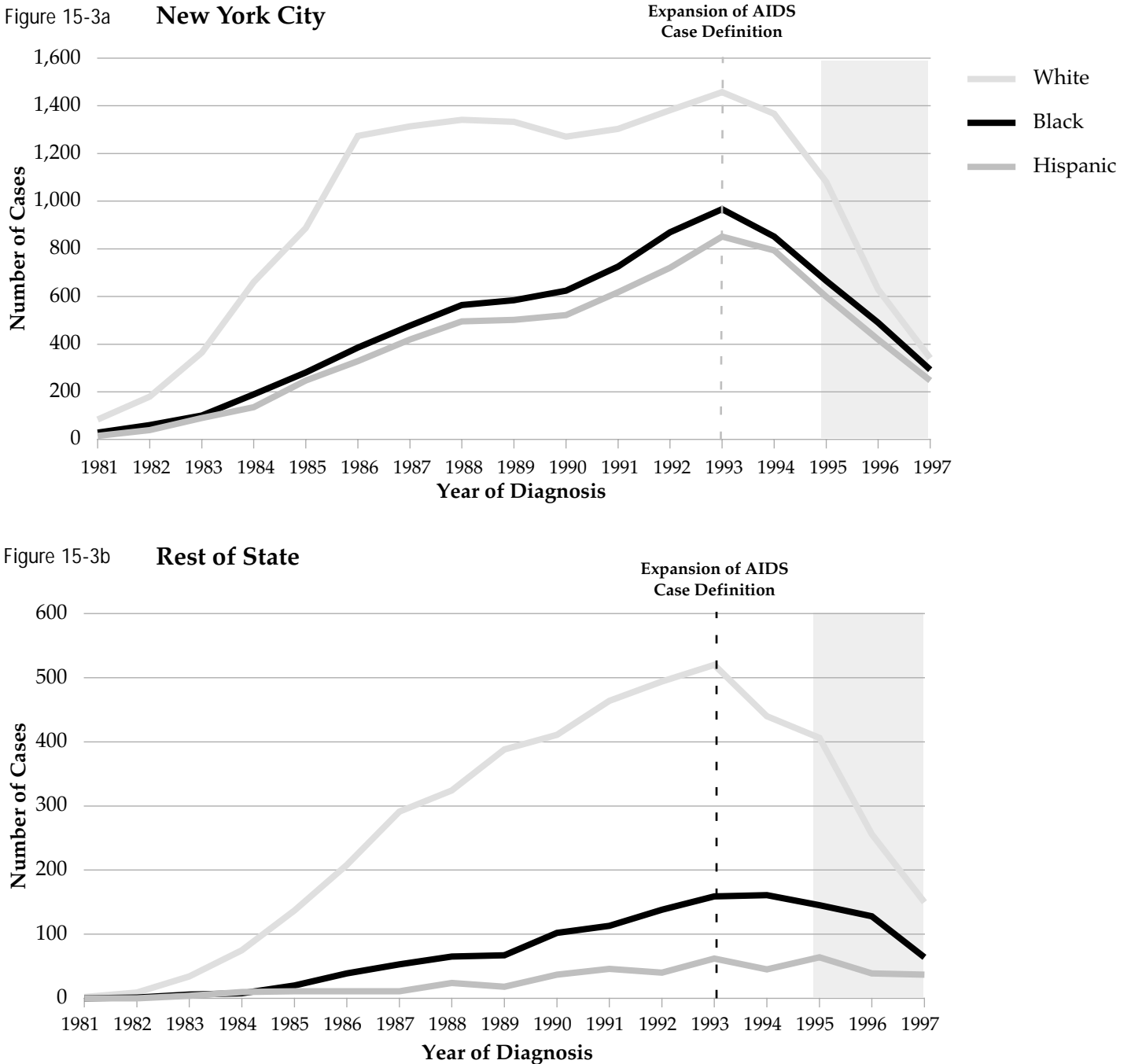
‡ On January 1, 1993, the AIDS Surveillance Case Definition for adults with HIV infection was expanded to include pulmonary tuberculosis, recurrent pneumonia, invasive cervical cancer and severe immunodeficiency (see page 57).

Data for 1996 and 1997 are incomplete due to lag in case reporting and time required for case confirmation.

Figure 15-3

# AIDS Cases Among Men Who Have Sex With Men by Race/Ethnicity, Year of Diagnosis and Region\*

New York State, Cases Confirmed through April 1998



On January 1, 1993, the AIDS Surveillance Case Definition for adults with HIV infection was expanded to include pulmonary tuberculosis, recurrent pneumonia, invasive cervical cancer and severe immunodeficiency (see page 57). Data for 1996 and 1997 are incomplete due to lag in case reporting and time required for case confirmation.

\* Excludes men with dual risk of male-to-male sex and injection drug use. Please note that scales of graphs are not consistent across regions. Due to small cases numbers, Asian/Pacific Islanders and Native American/Alaskan Natives are not presented here.

Figure 15-4

# AIDS Incidence Among Injecting Drug Users by Race/Ethnicity, Year of Diagnosis and Region\*

New York State, Cases Confirmed through April 1998

		White		Black		Hispanic		Asian/ Pacific Islander		Native American/ Alaskan Native		Total†
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number
<b>New York City</b>												
Through	81	3	7.9	19	50.0	16	42.1	0	—	0	—	38
	82	22	15.9	67	48.6	48	34.8	0	—	1	0.7	138
	83	44	13.9	148	46.8	123	38.9	0	—	0	—	316
	84	72	13.3	251	46.4	218	40.3	0	—	0	—	541
	85	117	12.7	460	50.1	338	36.8	0	—	1	0.1	918
	86	171	12.2	652	46.7	567	40.6	4	0.3	2	0.1	1,396
	87	292	15.4	854	44.9	752	39.6	1	0.1	0	—	1,901
	88	404	15.1	1,259	46.9	1,011	37.7	5	0.2	0	—	2,684
	89	430	14.9	1,371	47.6	1,066	37.0	7	0.2	1	<0.1	2,878
	90	498	13.9	1,711	47.8	1,362	38.1	3	0.1	0	—	3,576
	91	621	14.5	2,039	47.6	1,612	37.7	4	0.1	0	—	4,280
	92	796	15.2	2,503	47.7	1,937	36.9	11	0.2	0	—	5,251
	93‡	812	13.4	2,934	48.3	2,316	38.1	11	0.2	3	0.0	6,080
	94	625	11.8	2,551	48.1	2,126	40.1	5	0.1	0	—	5,308
	95	579	13.1	2,094	47.2	1,749	39.5	6	0.1	1	0.0	4,433
	96‡	346	11.1	1,512	48.7	1,236	39.8	6	0.2	1	0.0	3,107
	97‡	214	11.2	949	49.7	739	38.7	4	0.2	0	—	1,910
<b>Total</b>		<b>6,046</b>	<b>13.5</b>	<b>21,374</b>	<b>47.8</b>	<b>17,216</b>	<b>38.5</b>	<b>67</b>	<b>0.1</b>	<b>10</b>	<b>&lt;0.1</b>	<b>44,755</b>
<b>Rest of State</b>												
Through	81	1	25.0	2	50.0	1	25.0	0	—	0	—	4
	82	7	46.7	4	26.7	4	26.7	0	—	0	—	15
	83	23	37.1	16	25.8	23	37.1	0	—	0	—	62
	84	30	27.3	51	46.4	29	26.4	0	—	0	—	110
	85	48	22.5	89	41.8	75	35.2	0	—	1	0.5	213
	86	81	26.5	141	46.1	82	26.8	0	—	0	—	306
	87	141	28.3	209	41.9	147	29.5	0	—	2	0.4	499
	88	169	27.3	273	44.0	178	28.7	0	—	0	—	620
	89	217	27.9	357	45.8	204	26.2	0	—	1	0.1	779
	90	214	27.6	354	45.6	204	26.3	1	0.1	1	0.1	776
	91	249	24.8	476	47.3	280	27.8	0	—	0	—	1,006
	92	376	30.6	555	45.2	292	23.8	0	—	1	0.1	1,227
	93‡	366	27.8	603	45.8	341	25.9	2	0.2	0	—	1,316
	94	292	23.9	578	47.2	348	28.4	1	0.1	2	0.2	1,224
	95	298	27.7	508	47.3	265	24.7	0	—	1	0.1	1,074
	96‡	196	26.1	374	49.9	175	23.3	1	0.1	0	—	750
	97‡	112	26.0	229	53.1	89	20.6	0	—	1	0.2	431
<b>Total</b>		<b>2,820</b>	<b>27.1</b>	<b>4,819</b>	<b>46.3</b>	<b>2,737</b>	<b>26.3</b>	<b>5</b>	<b>&lt;0.1</b>	<b>10</b>	<b>0.1</b>	<b>10,412</b>

\* Excludes 3,781 men with dual risk of male-to-male sex and injection drug use.

† Includes 66 injecting drug users with unknown race/ethnicity.

‡ On January 1, 1993, the AIDS Surveillance Case Definition for adults with HIV infection was expanded to include pulmonary tuberculosis, recurrent pneumonia, invasive cervical cancer and severe immunodeficiency (see page 57). Data for 1996 and 1997 are incomplete due to lag in case reporting and time required for case confirmation.



# AIDS Incidence Among Injecting Drug Users by Race/Ethnicity, Year of Diagnosis and Region\*

New York State, Cases Confirmed through April 1998

Figure 15-4a **New York City**

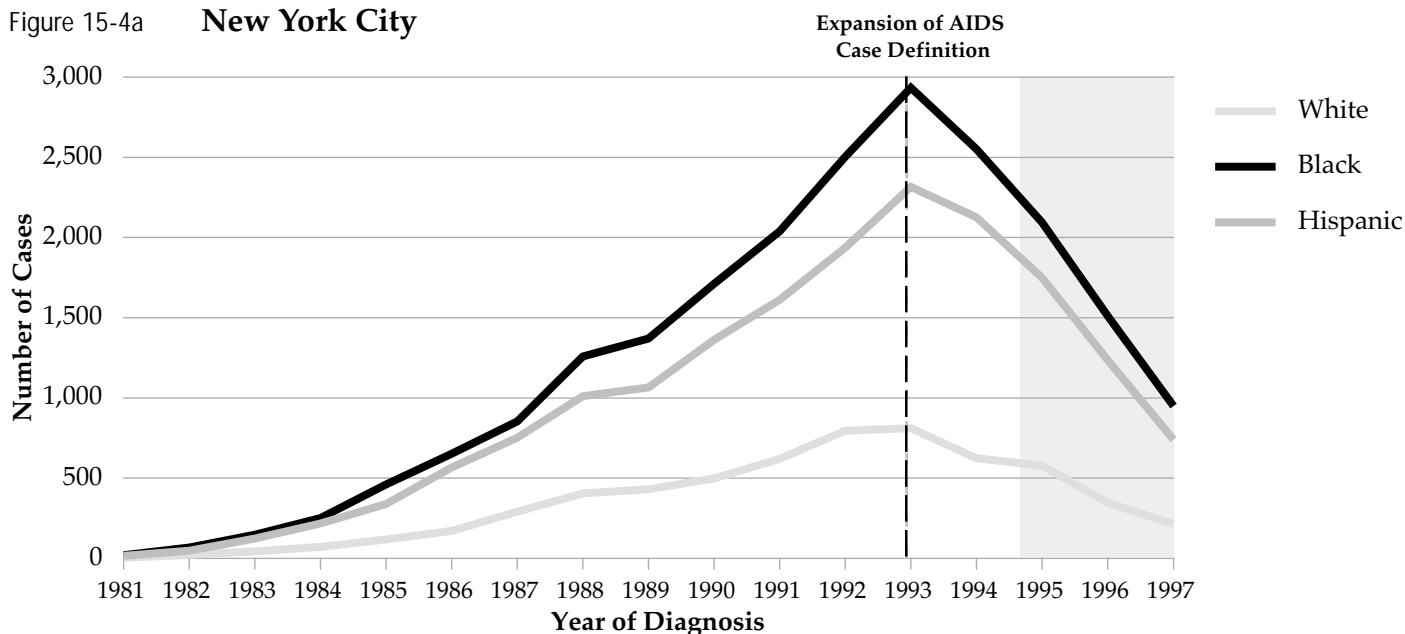
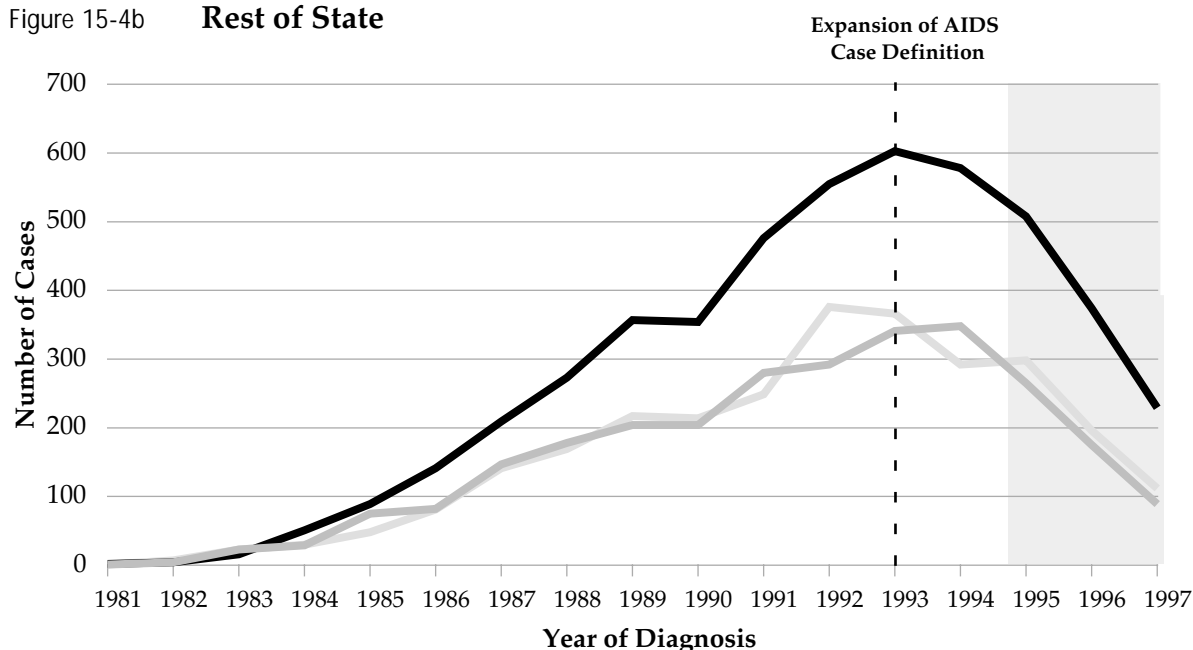


Figure 15-4b **Rest of State**



On January 1, 1993, the AIDS Surveillance Case Definition for adults with HIV infection was expanded to include pulmonary tuberculosis, recurrent pneumonia, invasive cervical cancer and severe immunodeficiency (see page 57). Data for 1996 and 1997 are incomplete due to lag in case reporting and time required for case confirmation.

\* Excludes men with dual risk of male-to-male sex and injection drug use. Please note that scales of graphs are not consistent across regions. Due to small case numbers, Asian/Pacific Islanders and Native American/Alaskan Natives are not presented here.

Figure 15-5

# AIDS Cases Attributable to Heterosexual Transmission by Race/Ethnicity, Year of Diagnosis, Gender, Age at Diagnosis, Exposure Category of Partner and Residence\*

New York State, Cases Confirmed through April 1998

	White				Black				Hispanic				Asian/Pacific Islander				Native American/Alaskan Native			
	1994	1995	1996†	1997†	1994	1995	1996†	1997†	1994	1995	1996†	1997†	1994	1995	1996†	1997†	1994	1995	1996†	1997†
<b>Gender</b>																				
Male	41	33	48	25	191	208	196	158	119	150	127	86	6	5	3	2	0	1	0	1
Female	187	169	108	83	576	537	465	296	449	416	299	191	4	7	5	2	0	1	0	0
<b>Age at Diagnosis</b>																				
13-19	2	2	0	2	7	1	1	2	2	2	1	0	0	0	0	0	0	0	0	0
20-24	7	12	5	5	41	26	22	20	22	32	16	5	0	0	3	0	0	0	0	0
25-29	27	29	17	9	110	86	87	46	72	82	51	29	1	2	0	0	0	0	0	0
30-39	109	84	66	47	351	351	299	195	231	222	198	117	6	5	2	2	0	2	0	1
40-49	57	52	49	29	176	206	167	124	166	139	106	87	1	3	2	1	0	0	0	0
50-59	16	18	12	12	54	57	57	51	50	70	46	30	0	2	0	0	0	0	0	0
>59	10	5	7	4	28	18	28	16	25	19	8	9	2	0	1	1	0	0	0	0
<b>Exposure Category of Partner</b>																				
Injecting Drug User	91	77	62	27	208	210	156	118	168	167	86	78	2	0	1	0	0	1	0	0
Bisexual Male	9	6	5	3	23	25	9	3	28	27	2	1	0	0	0	0	0	0	0	0
Blood Product Recipient	4	5	1	0	9	4	1	2	2	4	3	3	0	1	0	0	0	0	0	0
Not Reported	124	114	88	78	527	506	495	331	370	368	335	195	8	11	7	4	0	1	0	1
<b>Residence</b>																				
Bronx	15	16	14	6	126	133	132	86	194	211	169	102	1	0	1	0	0	0	0	0
Brooklyn	32	32	10	12	287	259	178	124	126	138	78	51	0	3	1	0	0	1	0	0
Manhattan	24	22	16	15	117	116	123	83	127	114	89	59	5	1	2	2	0	1	0	0
Queens	43	26	23	11	86	83	78	49	56	46	41	26	3	7	2	2	0	0	0	1
Staten Island	7	8	3	8	15	16	7	7	5	7	5	3	0	0	0	0	0	0	0	0
Borough Unknown	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rest of State	107	97	90	56	135	138	143	105	60	50	44	36	1	1	2	0	0	0	0	0
<b>Total</b>	<b>228</b>	<b>202</b>	<b>156</b>	<b>108</b>	<b>767</b>	<b>745</b>	<b>661</b>	<b>454</b>	<b>568</b>	<b>566</b>	<b>426</b>	<b>277</b>	<b>10</b>	<b>12</b>	<b>8</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>

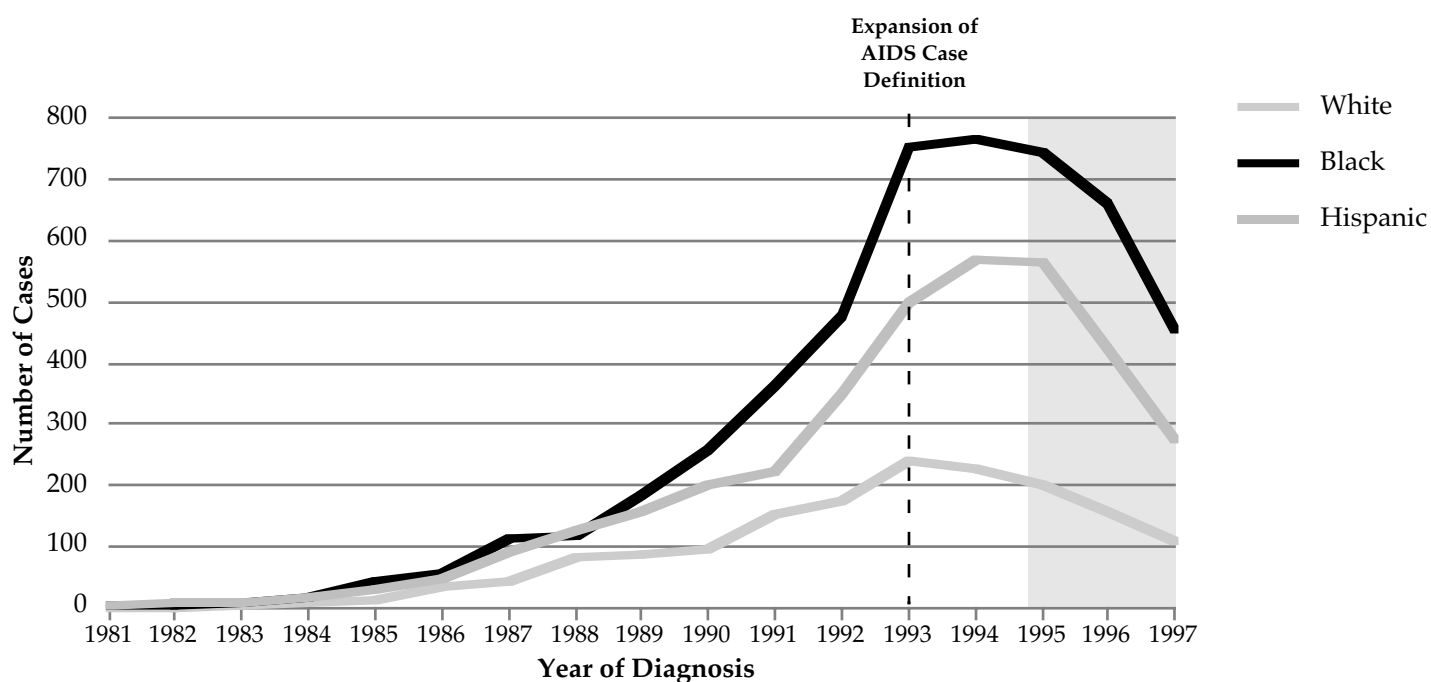
\* Excludes seven individuals with unknown race/ethnicity.

† Data for 1996 and 1997 are incomplete due to lag in case reporting and time required for case confirmation.

Figure 15-6

## AIDS Cases Attributable to Heterosexual Transmission by Race/Ethnicity and Year of Diagnosis

New York State, Cases Confirmed through April 1998



	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993*	1994	1995	1996*	1997*
White	0	0	1	6	12	34	42	81	86	97	151	176	238	228	202	156	108
Black	1	4	6	18	42	54	111	118	185	257	363	475	754	767	745	661	454
Hispanic	1	5	8	17	28	48	90	125	155	199	223	348	497	568	566	426	277
Asian/Pacific Islander	0	0	0	0	0	1	0	2	1	3	3	5	8	10	12	8	4
Native American/ Alaskan Native	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	1
Unknown	0	0	0	0	0	1	1	1	1	4	0	1	1	1	4	2	0

\* On January 1, 1993, the AIDS Surveillance Case Definition for adults with HIV infection was expanded to include pulmonary tuberculosis, recurrent pneumonia, invasive cervical cancer and severe immunodeficiency (see page 57). Data for 1996 and 1997 are incomplete due to lag in case reporting and time required for case confirmation .

# AIDS Cases Among Inmates in New York State Correctional Facilities

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Individuals incarcerated in New York State Department of Correctional Services facilities when diagnosed with AIDS are so noted on the AIDS Surveillance Case Registry. However, no documentation regarding incarceration status is available for individuals held in city or county jails or federal prisons at the time of AIDS diagnosis. Therefore, available AIDS case data reflect only those inmates incarcerated in New York State Department of Corrections facilities, which only partially represents the epidemic among incarcerated individuals in New York State. The New York State correctional system has reported 2,849 cases among inmates in the last four years (1994-1997) (see Figure 16-3). Of cases diagnosed in 1997 with a known exposure category, 88.1 percent were reported to have acquired HIV infection through injecting drug use.

In 1997, the Bureau of HIV / AIDS Epidemiology was allocated special funding from the CDC to conduct AIDS surveillance case finding in prisons. Throughout 1997, AIDS surveillance and the New York State Department of Correctional Services staff worked cooperatively to carry out this project. As a result, more than 2,300 AIDS cases among prisoners were identified and added to the New York State AIDS Registry (see Figure 16-2), representing more than one-third of total cases among prisoners known to the registry. These 2,387 cases were diagnosed in the period 1991-1997, and are included in the data presented here. However, information on HIV exposure category was not available for these cases.

Figure 16-1

# Distribution of AIDS Cases Diagnosed in 1997 Among State Prison Inmates

New York State, Cases Confirmed through April 1998

Figure 16-1a

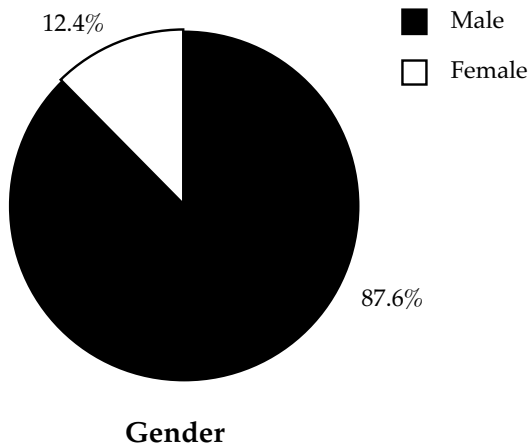


Figure 16-1b

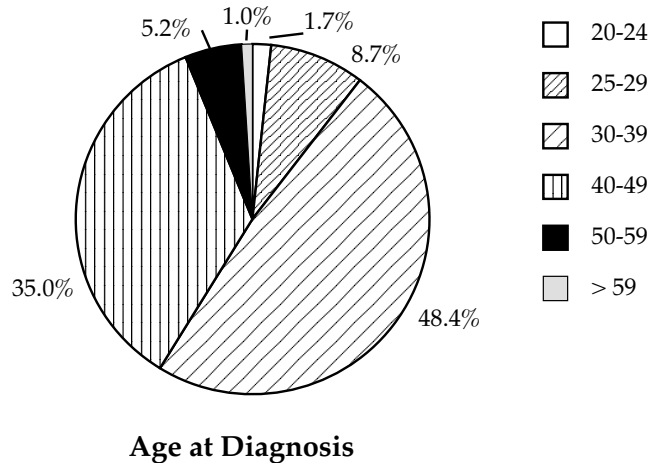


Figure 16-1c

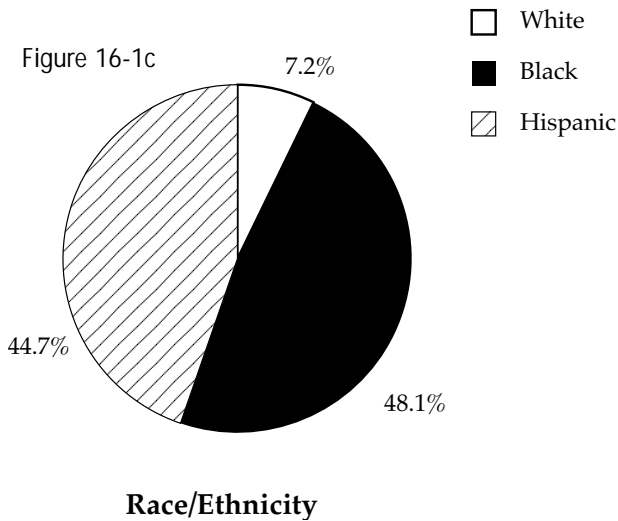
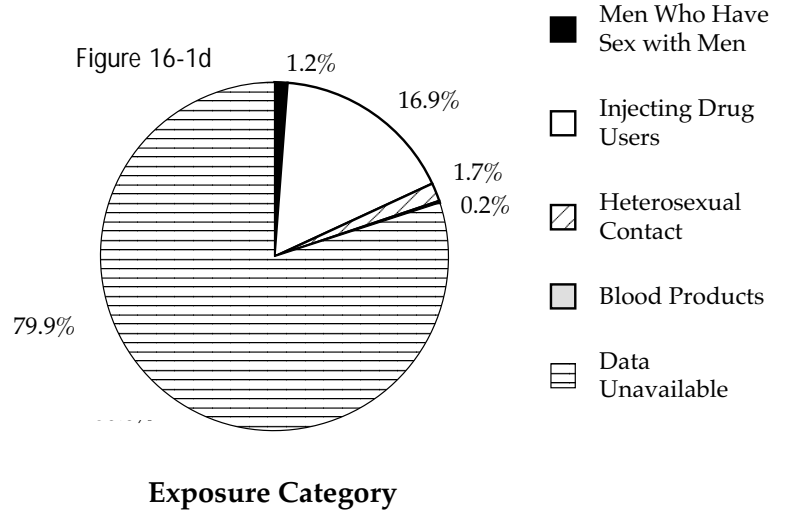


Figure 16-1d



\* No cases of AIDS were diagnosed among state prison inmates aged 13-19 during this period.

† No cases of AIDS were diagnosed in Asian/Pacific Islander or Native American/Alaskan Native state prison inmates during this period.

Figure 16-2

# Impact of the Prison Case Finding Initiative on AIDS Case Surveillance by County

New York State, Cases Confirmed through April 1998

County	Cumulative AIDS Cases			
	Non-Inmates	Inmates: Regular Surveillance	Inmates: 1997 Initiative	Total
Albany	730	11	0	741
Allegany	10	0	0	10
Bronx	19,485	48	51	19,584
Broome	176	0	0	176
Cattaraugus	36	6	25	67
Cayuga	46	146	71	263
Chautauqua	62	9	5	76
Chemung	97	68	35	200
Chenango	25	5	2	32
Clinton	33	260	83	376
Columbia	63	31	19	113
Cortland	11	0	0	11
Delaware	25	0	0	25
Dutchess	513	547	154	1,214
Erie	1,188	84	61	1,333
Essex	46	88	21	155
Franklin	15	154	120	289
Fulton	26	0	0	26
Genesee	28	0	0	28
Greene	39	89	34	162
Hamilton	1	0	0	1
Herkimer	21	0	0	21
Jefferson	48	100	81	229
Kings	25,374	33	0	25,407
Lewis	7	0	0	7
Livingston	42	58	67	167
Madison	22	4	3	29
Monroe	1,481	16	2	1,499
Montgomery	50	0	0	50
Nassau	2,766	26	0	2,792
New York	37,643	93	200	37,936
Niagara	147	0	0	14
Oneida	228	299	268	795
Onondaga	763	7	0	770
Ontario	35	0	0	35
Orange	669	207	54	930
Orleans	28	150	106	284
Oswego	57	0	0	57
Otsego	43	0	0	43
Putnam	129	0	0	129

Impact of the Prison Case Finding Initiative on AIDS Case Surveillance by County (continued)

County	Cumulative AIDS Cases			
	Non-Inmates	Inmates: Regular Surveillance	Inmates: 1997 Initiative	Total
Queens	13,504	57	125	13,686
Rensselaer	181	0	0	181
Richmond	2,111	29	78	2,218
Rockland	635	0	0	635
St. Lawrence	30	106	117	253
Saratoga	119	78	38	235
Schenectady	239	0	0	239
Schoharie	27	0	0	27
Schuyler	12	0	0	12
Seneca	14	4	36	54
Steuben	49	0	0	49
Suffolk	2,871	43	0	2,914
Sullivan	292	141	64	497
Tioga	21	0	0	21
Tompkins	85	0	0	85
Ulster	391	216	113	720
Warren	43	0	0	43
Washington	21	196	58	275
Wayne	59	5	6	70
Westchester	3,083	420	142	3,645
Wyoming	12	137	148	297
Yates	9	0	0	9
New York City – Borough				
Unknown	8	0	0	8
<b>Total</b>	<b>116,024</b>	<b>3,971</b>	<b>2,387</b>	<b>122,382</b>

Figure 16-3

# AIDS Cases Diagnosed in 1994 - 1997 Among State Prison Inmates by Race/Ethnicity\*, Year of Diagnosis, Gender, Age at Diagnosis and Exposure Category

New York State, Cases Confirmed through April 1998

	Race/Ethnicity											
	White				Black				Hispanic			
	1994	1995	1996 <sup>†</sup>	1997 <sup>†</sup>	1994	1995	1996 <sup>†</sup>	1997 <sup>†</sup>	1994	1995	1996 <sup>†</sup>	1997 <sup>†</sup>
<b>Gender</b>												
Male	68	69	56	25	315	357	297	158	346	354	335	170
Female	12	4	6	4	39	38	40	36	40	31	28	10
<b>Age at Diagnosis</b>												
13-19	0	0	0	0	1	1	0	0	0	1	0	0
20-24	2	1	0	0	6	9	8	3	6	13	6	4
25-29	12	6	6	4	43	35	22	15	53	37	37	16
30-39	34	42	31	16	163	195	164	87	210	210	184	92
40-49	28	24	21	8	114	139	126	72	105	109	124	61
50-59	4	0	4	1	23	15	17	13	12	13	11	7
>59	0	0	0	0	4	1	0	4	0	2	1	0
<b>Exposure Category</b>												
Men Who Have Sex With Men	4	2	0	0	12	10	5	2	6	3	2	3
Injecting Drug Users	43	33	14	7	173	115	59	32	192	133	78	29
Men Who Have Sex with Men and Inject Drugs	1	2	2	0	2	10	2	0	3	2	1	0
Receipt of Blood Products	0	1	0	0	0	1	0	1	0	0	0	0
Heterosexual Contact	1	0	3	0	10	7	4	6	9	3	2	1
Undetermined	31	35	43	22	157	252	267	153	176	244	280	147
<b>Total</b>	<b>80</b>	<b>73</b>	<b>62</b>	<b>29</b>	<b>354</b>	<b>395</b>	<b>337</b>	<b>194</b>	<b>386</b>	<b>385</b>	<b>363</b>	<b>180</b>

\* Five AIDS cases were diagnosed among Native American/Alaskan Native, and two cases among Asian/Pacific Islander state prison inmates during this period.

† Data for 1996 and 1997 are incomplete due to lag in case reporting and time required for case confirmation.



### Mortality Due to AIDS

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Vital status of cases is determined from updated case reports, information on HIV-related deaths in New York State (maintained by the New York State Department of Health Bureau of Production Systems in death certificate files), the National Death Index and from voluntary reporting on known New York State residents from other states (until 1996). Unless an individual is known to be deceased from these sources, that individual is presumed alive. Of the 125,640 cases diagnosed in New York State through 1997, 79,318 cases are known to have died, a cumulative case fatality rate of 63.1 percent (see Figure 17-1).

The number of deaths attributed to HIV / AIDS began a dramatic decline in 1996 in both New York City and the rest of the state (see Figure 17-3). Based on provisional 1997 data from New York State death certificates, the decline appears to be continuing. This overall reduction in AIDS deaths has been attributed in large part to an expansion of treatment modalities, especially combination antiretroviral therapies including protease inhibitors, and improved access and expansion of related services.

Figure 17-1

## Mortality Among AIDS Cases by Year of Diagnosis

New York State, Cases Confirmed through April 1998

Diagnosis	Number of Cases	Number of Known Deaths through 4/98*	Case Fatality Rate (%)
Before 1980	15	13	86.7
1980	34	30	88.2
1981	156	145	92.9
1982	551	511	92.7
1983	1,188	1,113	93.7
1984	2,057	1,887	91.7
1985	3,211	2,936	91.4
1986	4,690	4,318	92.1
1987	5,980	5,359	89.6
1988	7,394	6,470	87.5
1989	8,029	6,968	86.8
1990	8,971	7,565	84.3
1991	10,687	8,614	80.6
1992	12,966	9,355	72.2
1993 <sup>†</sup>	14,999	9,367	62.5
1994	14,275	7,165	50.2
1995	13,335	4,667	35.0
1996 <sup>†</sup>	10,401	2,061	19.8
1997 <sup>†</sup>	6,701	774	11.6
<b>Total</b>	<b>125,640</b>	<b>79,318</b>	<b>63.1</b>

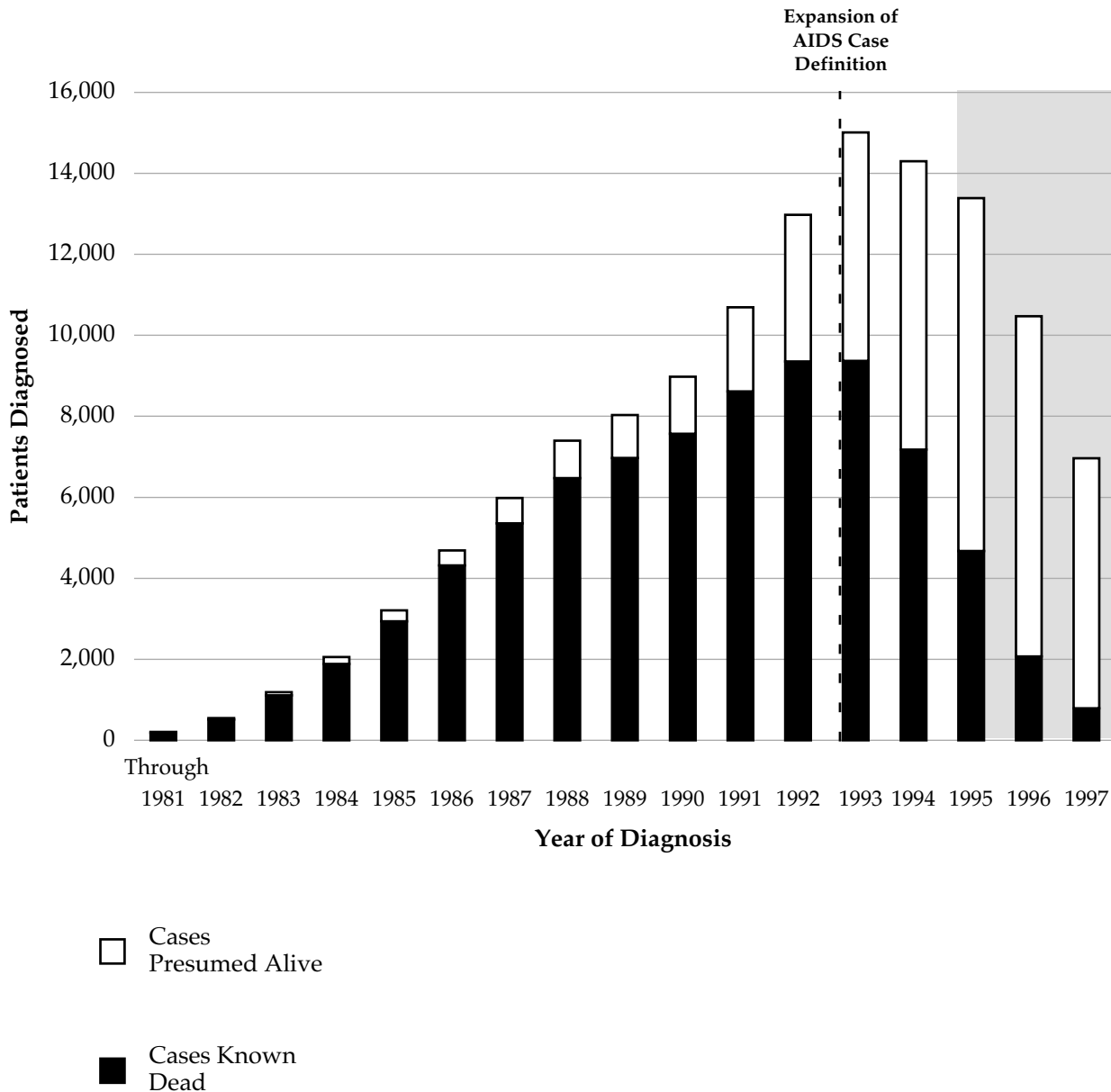
\* Death information is obtained from the New York State Department of Health Bureau of Production Systems, the National Death Index and voluntary reporting of deaths of known New York State residents by other states.

† On January 1, 1993, the AIDS Surveillance Case Definition for adults with HIV infection was expanded to include pulmonary tuberculosis, recurrent pneumonia, invasive cervical cancer and severe immunodeficiency (see page 57). Data for 1996 and 1997 are incomplete due to lag in case reporting and time required for case confirmation.

Figure 17-2

## Mortality Among AIDS Patients by Year of Diagnosis

New York State, Cases Confirmed through April 1998

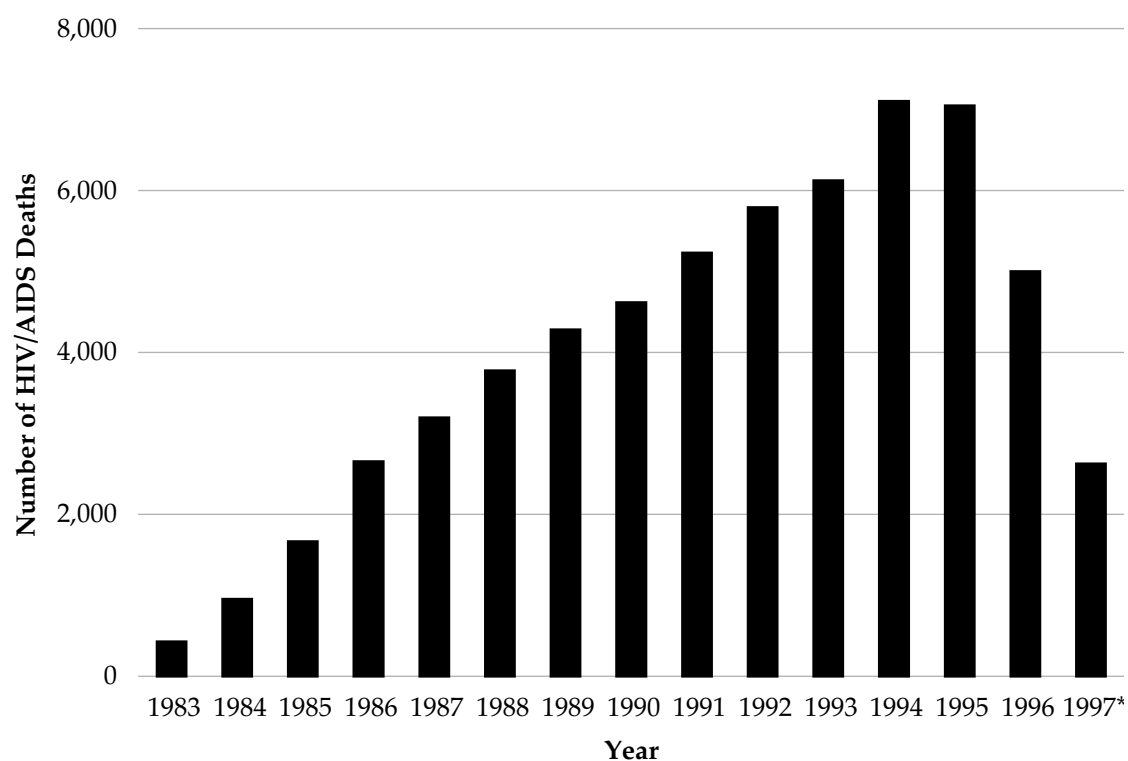


On January 1, 1993, the AIDS Surveillance Case Definition for adults with HIV infection was expanded to include pulmonary tuberculosis, recurrent pneumonia, invasive cervical cancer and severe immunodeficiency (see page 57). Data for 1996 and 1997 are incomplete due to lag in case reporting and time required for case confirmation.

Figure 17-3

## Deaths from HIV / AIDS

New York City, 1983 - 1997



\* Data for 1997 are provisional.

Data are for deaths attributable to HIV / AIDS, as reported on death certificates of individuals dying in New York City.

Figure 17-4

# Ranking of AIDS Among the Five Leading Causes of Death by Population Group and Age

New York State, 1996

	Age						
	<1	1 - 9	10 - 19	20 - 29	30 - 39	40 - 49	50 - 59
<b>New York City Males</b>							
Total	5 <sup>+</sup>	1	5	2	1	1	3
White	5 <sup>+</sup>	1	4	2	1	1	3
Black	—	1	4	2	1	1	3
Hispanic	—	1 <sup>+</sup>	4 <sup>+</sup>	2	1	1	2
<b>New York City Females</b>							
Total	5 <sup>+</sup>	1	4	1	1	1	3
White	4 <sup>+</sup>	1	3	1	1	2	3
Black	—	1	2	1	1	1	3
Hispanic	4 <sup>+</sup>	1	2	1	1	1	3
<b>Rest of State Males</b>							
Total	—	4 <sup>+</sup>	—	5 <sup>+</sup>	1	3	—
White	—	—	—	—	2	4	—
Black	—	2	—	3	1	1	3
Hispanic	—	2	5 <sup>+</sup>	4	1	1	3
<b>Rest of State Females</b>							
Total	—	—	—	—	4	3	—
White	—	—	—	—	—	5	—
Black	—	2	—	1 <sup>+</sup>	1	3	—
Hispanic	—	3 <sup>+</sup>	—	5 <sup>+</sup>	3 <sup>+</sup>	2 <sup>+</sup>	—

\* Data are provisional. Numbers in columns refer to the ranking of AIDS among the five leading causes of death in selected population groups in New York State. A '1' means that AIDS is the leading cause of death in that population (for example, New York City males age 1-9). A '5' means that AIDS is the 5th leading cause (i.e., four other causes account for more deaths in that population group). A '—' means that AIDS is not among the five leading causes of death in that population.

† Tie with another cause of death.

Figure 17-5

# AIDS as a Leading Cause of Death for New York City Men and Women Ages 20 - 39

New York City, 1984 - 1996

Figure 17-5a New York City Males - Ages 20 - 39

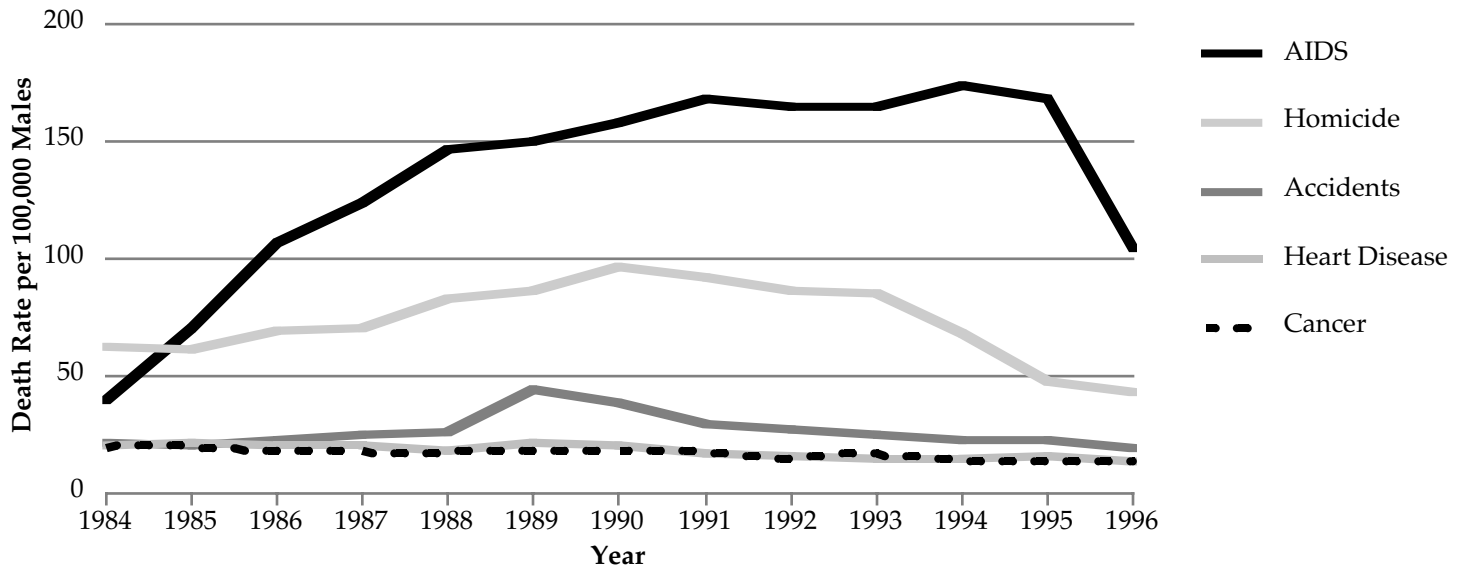
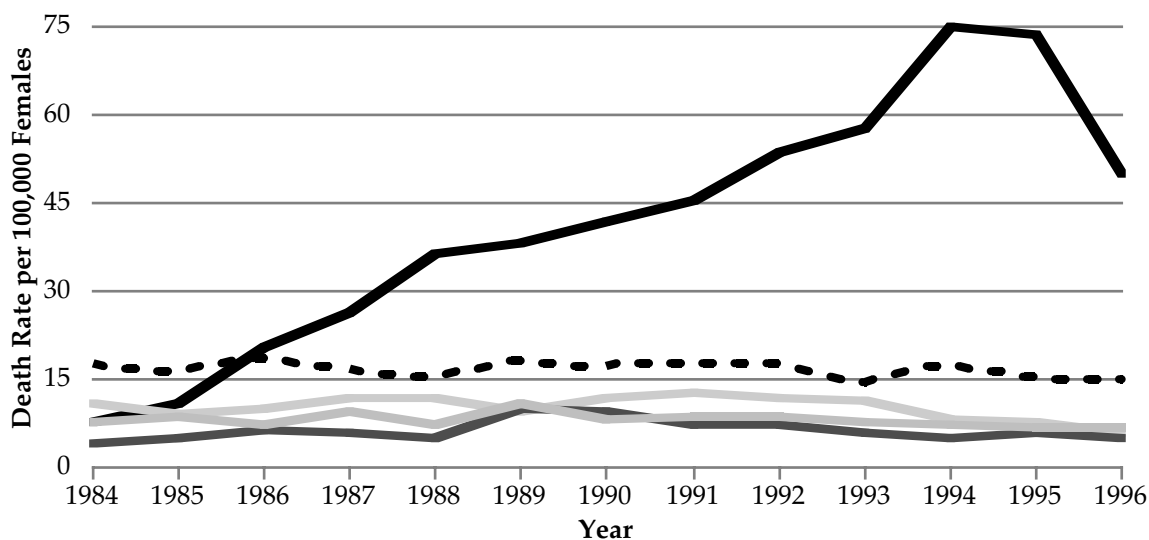


Figure 17-5b New York City Females - Ages 20 - 39



# Health Services and Expenditures for HIV/AIDS in New York State

## HIV Uninsured Care Programs

The HIV Uninsured Care Programs - ADAP, ADAP Plus (ambulatory care) and the HIV Home Care Program - play a vital role in New York State's health care system for people living with HIV/AIDS. These programs are funded through a unique partnership between the New York State Department of Health and the New York City, Lower Hudson, Long Island and Dutchess County regions, with federal Ryan White Care Act funds as well as state funds. These programs assure access to drugs and medical care for uninsured and underinsured state residents with HIV/AIDS. The programs serve individuals who are ineligible for Medicaid and lack adequate private insurance.

In late 1995 and early 1996, the U.S. Food and Drug Administration (FDA) approved three of a new class of antiretrovirals drugs, protease inhibitors, as well as the first nucleoside analog specifically indicated for use in combination with other antiretrovirals. Combination therapy, the simultaneous use of three antiretroviral drugs including one protease inhibitor, rapidly emerged as the new standard of HIV/AIDS care during 1996. In 1997, the National Institutes of Health and the U.S. Department of Health and Human Services published principles and guidelines for antiretroviral therapy, which translated the scientific advances in HIV research into recommendations for treatment of HIV infection

with specific combinations of antiretroviral drugs.

### Enrollment

The HIV Uninsured Care Programs enrolled 6,019 new participants in 1997, for a total enrollment of 17,876 during the year. Most participants are enrolled in more than one of the three programs. ADAP enrollment provides a reliable measure of overall program enrollment trends, and generally reflects the changing demographics of the AIDS epidemic. There has been a continuing increase in the percentage of enrollees who are female and minority (see Figure 18-1). African-American enrollment has increased significantly in the past two years. Active enrollment grew throughout 1997, due to new enrollees and participants remaining with the program for longer periods. Total active enrollment increased by 16 percent, from 10,447 at the beginning of 1997 to 12,139 at the end of the year.

### Utilization and Expenditures

Utilization of drugs and services in the HIV Uninsured Care Programs changed dramatically between 1995 and 1997, primarily due to the rapid evolution of combination antiretroviral therapy as the standard of HIV care. Utilization is best viewed longitudinally by the number of monthly "users" of drugs or services. Users are defined as participants, for whom

the programs have reimbursed a claim from a provider for a drug or service.

ADAP Drug Utilization by Category (see Figure 18-2) shows clear and strong trends. Users of any drug have doubled in a three-year period. The growth trend was interrupted by a temporary formulary reduction in the first half of 1996. The utilization of nucleoside analogs alone and in combination increased gradually throughout 1995. A steep growth curve in both nucleoside analogs and combination therapy followed the FDA approval of a nucleoside analog for use in combination therapy in November 1995. The number of monthly users of protease inhibitors began at a relatively high level following implementation of coverage on July 1, 1996. The high initial use of protease inhibitors can be attributed to the International AIDS Conference in July that generated considerable media and clinical excitement. Also, many participants initially accessed these drugs through manufacturer's patient assistance programs and then transitioned to ADAP coverage. The utilization trends of the categories of combination use, nucleoside analogs and any drugs have risen sharply and in parallel. Coverage of nonnucleoside reverse transcriptase inhibitors (NNRTI), alternative antiretroviral drugs used in combination therapy, began following FDA approval in September 1996. Utilization of

NNRTIs has been growing but at a slower pace than other antiretrovirals. Only the number of monthly users of medications for prophylaxis and treatment of opportunistic infections has been relatively stable from 1995 through 1997.

By December 1997, 75 percent of ADAP's active users were receiving three or more antiretroviral drugs in combination, with an additional 15 percent receiving two drug combinations. This is likely an undercount of actual combination use since the analysis considers only drugs paid for by ADAP, and participants may also access drugs through other sources, such as clinical trials, Medicaid spenddown, private insurance or manufacturer's patient assistance and compassionate use programs.

Antiretroviral drug costs have increased sharply since December 1995. These costs have been the driving factor in the growth of the ADAP budget. From December 1995 to December 1997, ADAP's monthly antiretroviral costs increased by 577 percent (see Figure 18-3).

Total ADAP drug expenditures increased by more than \$39 million (103%) from 1996 to 1997. Antiretroviral drugs accounted for 80 percent of the ADAP costs in 1996, compared to only 27 percent in 1995. The cost of many categories of drugs for opportunistic infections and related conditions have declined

dramatically from 1995 to 1997. Examples include hematology (78%), cryptosporidiosis (73%), antineoplastics (35%), wasting syndrome (31%) and antifungals (24%). These reductions in costs indicate a general improvement in the clinical status of ADAP participants.

Total users of ADAP Plus increased significantly in 1997, increasing by 38.7 percent from 1996. Increases occurred in utilization for all types of visits, except ambulatory surgery. Lab tests increased dramatically (241%), with 31,777 units of service in 1997 compared to 9,308 in 1996. The elimination of vitamins and supplements from ADAP Plus coverage for most of 1996 reduced the total expenditures for that year and also resulted in a decrease in the average number of services per person and an increase in the average cost per unit/visit.

Home care utilization and enrollment decreased rapidly in the first half of 1996, coinciding with the widespread use of combination antiretroviral therapy, and then declined further in 1997. Enrollment decreased by 73 percent, from a monthly average of 293 participants during 1995 to an average of 79 during 1997. There were also decreases in the number of new enrollees (62.6%), average cost per person (56.7%) and average number of visits per person (38.8%). Total home care expenditures have decreased by

more than \$7.3 million (86%), from 1995 to 1997.

The changes in home care are primarily the result of two factors: the improved clinical status of AIDS patients resulting from combination antiretroviral therapy, and the programs' implementation of a lifetime cap on reimbursement for home care services. The impact of improved clinical status would be evidenced through the reduction in new enrollees, as well as in lower levels of service utilization. The reimbursement cap was designed to encourage timely transition to Medicaid for individuals who could meet Medicaid eligibility criteria as well as to encourage a lower level use of home care services. The effects of the reimbursement cap would tend also to be seen in a reduction in the level of service utilization.

Quarterly expenditures for each of the three program components show a steady increase from 1993 through 1995 (see Figure 18-4). The first two quarters of 1996 had a major decrease in expenditures, following temporary service coverage reductions and a decline in the demand for home care services. Total expenditures for the three programs have increased sharply since the third quarter of 1996, and exceeded \$25 million per quarter at the end of 1997.



Figure 18-1

## ADAP Enrollment by Gender, Race/Ethnicity and Year of Enrollment

New York State, October 1987 - December 1997

Figure 18-1a Gender Percentage by Enrollment Year

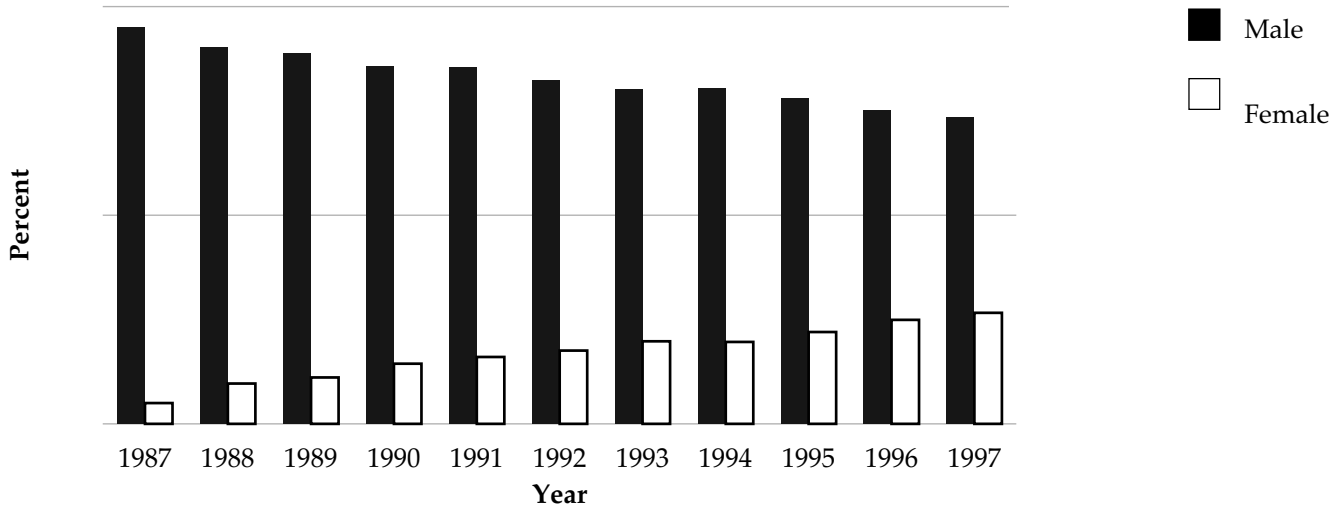


Figure 18-1b Race/Ethnicity Percentage by Enrollment Year

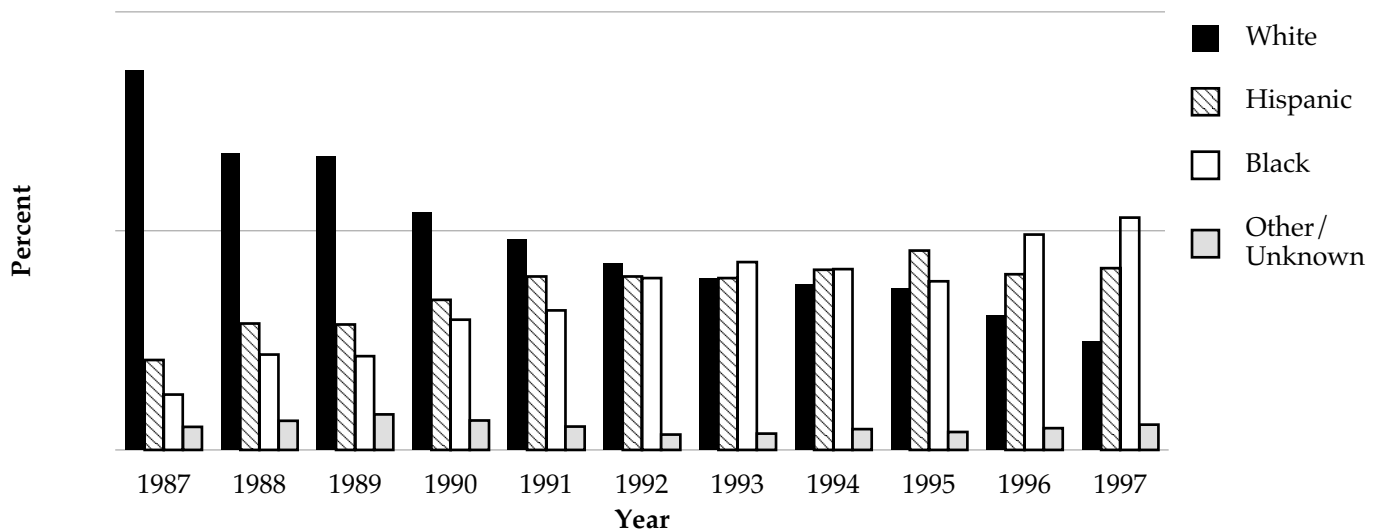


Figure 18-2

## ADAP Drug Utilization by Category Users by Month

New York State, January 1995, through December 1997

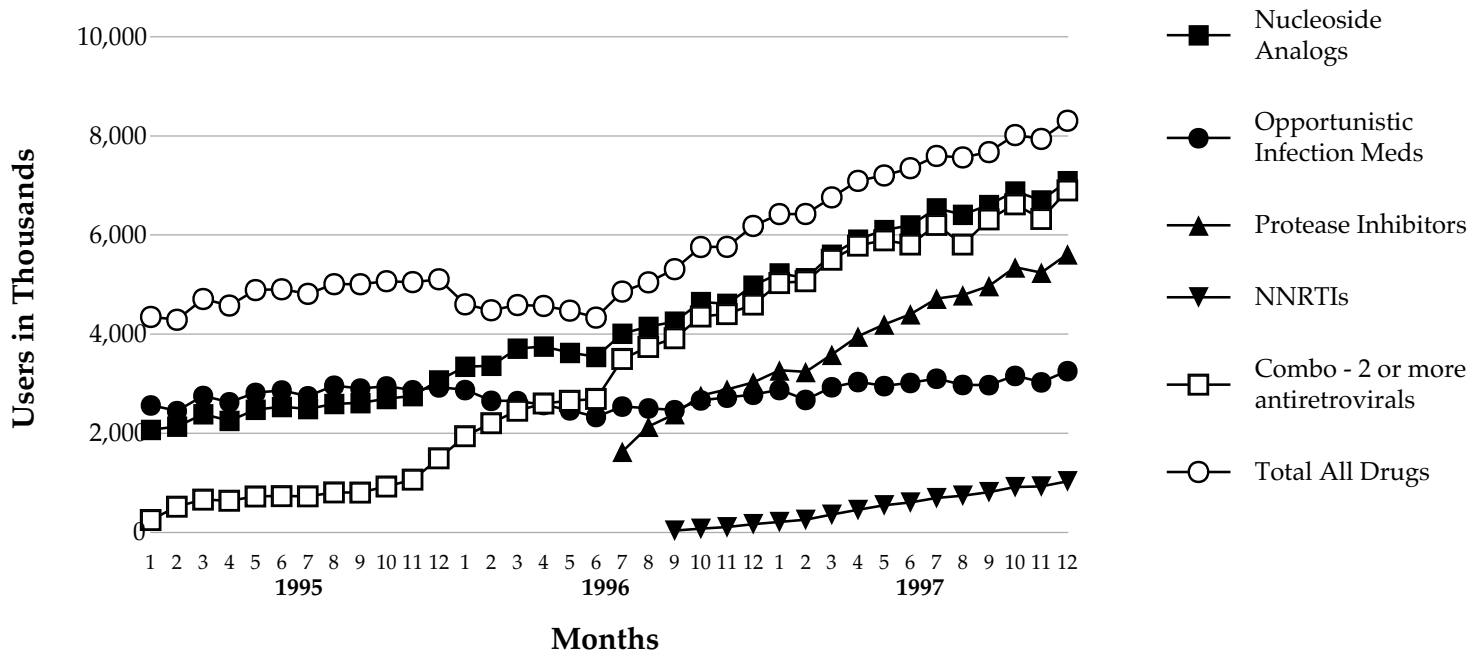


Figure 18-3

## Monthly Cost of Anti-Retroviral Therapy by Drug Category

New York State ADAP, January 1995 - December 1997

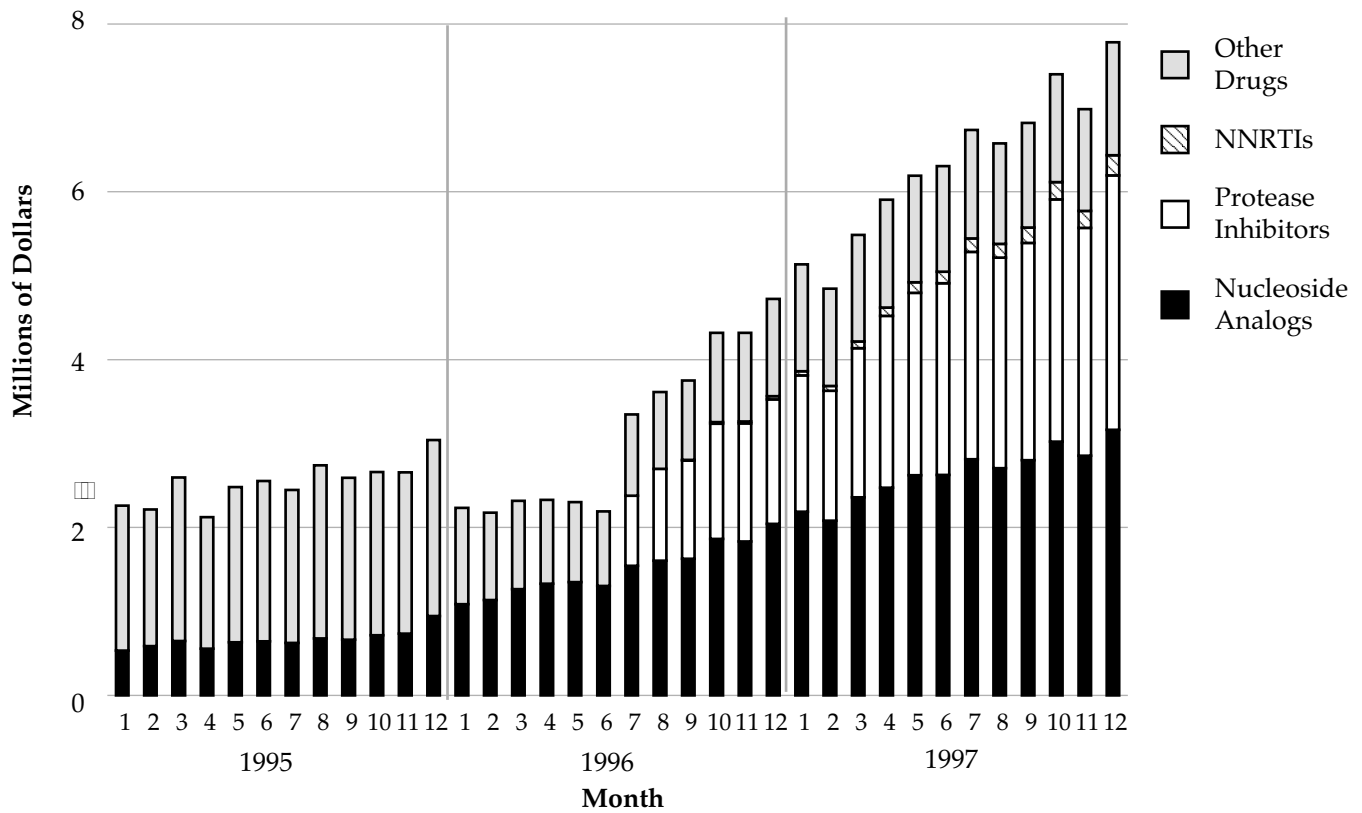
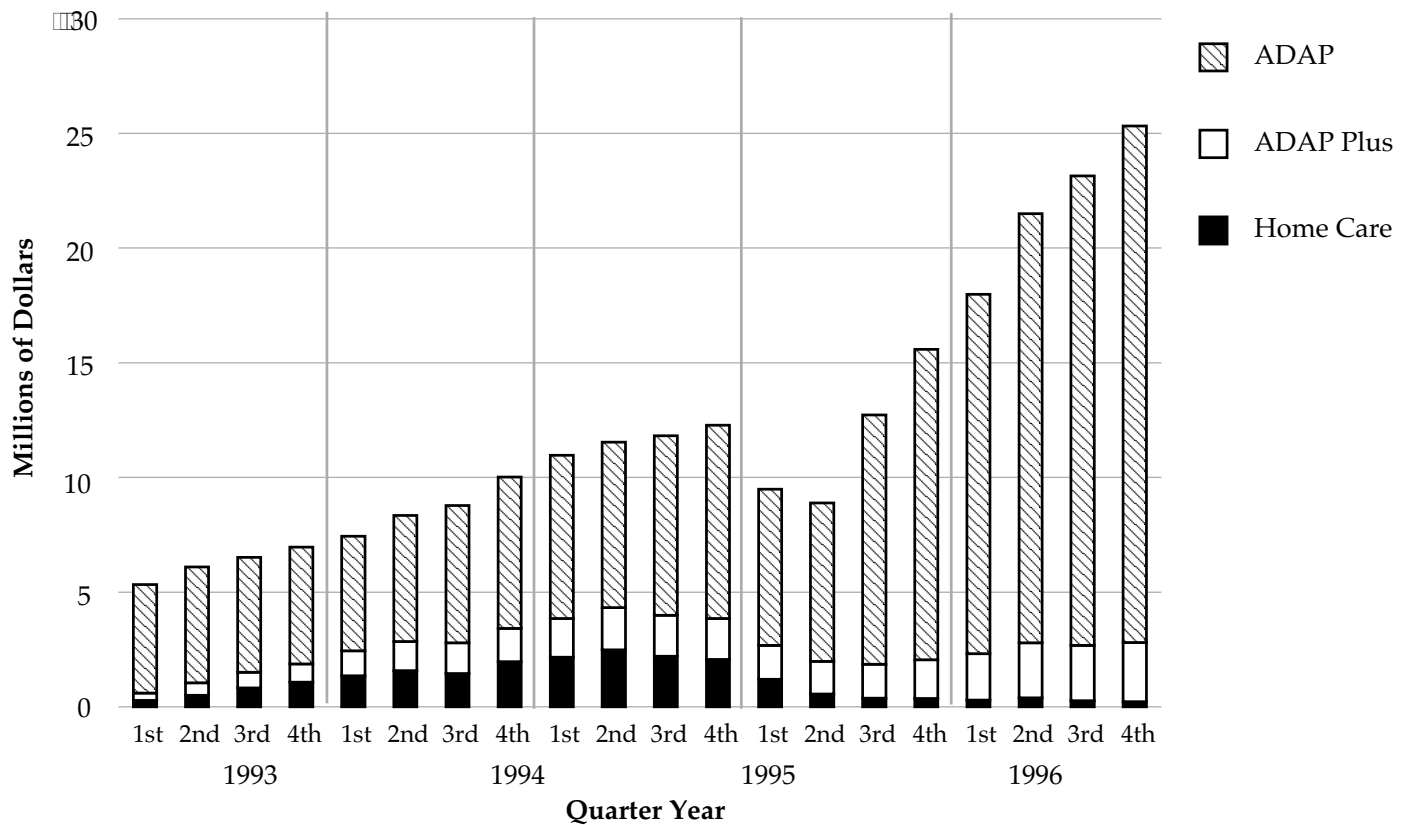


Figure 18-4

## Expenditures for HIV Uninsured Care Programs by Program and Quarter Year

New York State, 1993 - 1997



\* Drug/Service reductions were implemented on January 1, 1996, due to inadequate funding. Protease inhibitors were added on July 1, 1996. Drug/Service restorations occurred on September 1, 1996, and December 12, 1996.

## Use of Hospitals for HIV / AIDS Care

Data presented in this publication are used by both government and the health care industry to plan and expand health care services to meet the needs of HIV-infected people. Creating access to care for infected New York residents is complicated by the fact that many of them are poor, with no health insurance or routine contact with the health care system.

Hospital utilization for HIV / AIDS care grew steadily through the mid-1990s. As improved treatments emerge for HIV infection, those who are infected require a broader spectrum of health care services. To meet this growing need, the state has developed special reimbursement rates to stimulate expansion of HIV-related primary care services, home care, adult day care, residential health care beds and supportive housing.

### Hospital Use

The annual number of HIV / AIDS-related hospitalizations in New York State grew from 41,800 in 1990 to approximately 65,300 in 1995 and appears to have dropped to about 50,000 in 1997. Hospitalization data reported to the statewide discharge data system (SPARCS) show an average daily census of about 42,500 for HIV / AIDS in 1997, which amounted to 3.2 percent of the statewide average daily census. In 1997, the HIV / AIDS average daily census comprised

5.5 percent of total hospitalized patients in New York City and 1 percent in the rest of the state. (SPARCS data for 1997 were approximately 95 percent complete at the time this information was compiled.)

Approximately 81 percent of HIV / AIDS hospital discharges in 1997 were in New York City. Manhattan had the largest proportion of the five boroughs, accounting for 36 percent of the statewide total and 44 percent of the city total.

HIV / AIDS hospital lengths of stay have been dropping steadily. The average stay was 18.9 days in 1990 and 10.1 days in 1997. In 1990, 50 percent of stays were 10 days or less, and in 1997, 74 percent.

In 1997, children (up to age 12) made up 1.6 percent of HIV / AIDS hospital admissions. Pediatric admissions have steadily declined from a peak of 2,000 per year in the early 1990s to about 1,300 in 1997. In 1997, children under one year of age represented 20 percent of the pediatric total, 32 percent were one to four years old, and children aged five to 12 years comprised 48 percent of all pediatric hospitalizations. The average length of stay of the entire pediatric group was 8.8 days, but children under one year of age had an average length of stay of 14 days.

Most hospitalized HIV / AIDS patients (71%) were discharged home in 1997. The percentage of patients who die in the hospital has been declining for several years. In 1990, 13 percent of patients admitted died in the hospital; by 1997, the proportion fell to 5 percent. The number leaving against medical advice peaked at 14 percent in 1993, but declined to 11 percent in 1997. Discharges to nursing homes grew steadily in response to the state's planned expansion of nursing home care for HIV / AIDS patients in the early 1990s. In 1997, 3 percent of discharges were to long term care facilities.

The voluntary hospitals had about 73 percent of HIV / AIDS admissions in 1997, while public hospitals accounted for 25 percent of the total. These proportions have not changed in several years. Average length of stay in public hospitals (13.2 days) is greater than in the voluntary hospitals (9.1 days), and the public hospitals account for one-third of all HIV / AIDS hospital days. AIDS patients make up a greater proportion of the overall patient load in public hospitals than they do in voluntary hospitals. In 1997, 6 percent of all patient days in public hospitals were for HIV / AIDS patients. In contrast, only 3 percent of total patient days in the voluntary hospitals were for HIV / AIDS patients. In New York City Health and Hospitals Corporation (HHC) hospitals, 9 percent of patient days were attributable to HIV / AIDS.

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Hospitals designated as AIDS Centers are providing care to a large proportion of HIV/AIDS patients. In 1997, about 48 percent of HIV/AIDS discharges were from AIDS Centers. About 5 percent of total 1997 hospital days in the AIDS Centers were for HIV/AIDS patients, compared with 2 percent in hospitals that were neither designated centers nor New York City HHC hospitals. The average length of stay for AIDS patients in AIDS Centers was 9.5 days compared to 14.2 in New York City public hospitals and 8.8 days in other hospitals.

The number of patients hospitalized with both HIV and

Tuberculosis grew from about 4,250 in 1990 to a peak of 6,200 in 1992 and declined steadily to 1,400 in 1997. Tuberculosis was a primary or secondary diagnosis in about 3 percent of all 1997 HIV/AIDS hospitalizations.

Medicaid remains the most common primary expected payor for HIV/AIDS patients, rising from 60 percent in 1990 to 68 percent in 1997. The increase in the proportion of Medicaid patients probably reflects the growing number of HIV-infected injecting drug users, their sexual partners and offspring. Blue Cross and commercial payors accounted for a declining proportion of cases, dropping from 23 to 7 percent during the period 1990-1997.

Figure 19-1

# HIV / AIDS Hospital Discharges, Days and Length of Stay by Year

New York State, 1990 - 1997\*

Figure 19-1a **Number of Discharges**

	Length of Stay in Days							Total Discharges	Total Days	Average Length of Stay
	1-4	5-10	11-20	21-30	31-40	41-100	> 100			
1990	8,990	12,142	9,408	4,761	2,187	3,487	822	41,797	789,510	18.9
1991	11,369	16,134	11,222	5,447	2,508	3,800	842	51,322	905,468	17.6
1992	13,319	19,046	12,481	5,819	2,730	4,117	778	58,291	968,484	16.6
1993	14,421	20,994	13,306	5,919	2,673	4,040	800	62,153	1,003,607	16.1
1994	15,443	22,327	13,517	5,968	2,644	3,592	612	64,103	960,258	15.0
1995	17,722	23,604	13,250	5,275	2,293	2,737	377	65,258	846,074	13.0
1996	18,557	22,955	11,215	4,371	1,705	1,950	268	61,021	707,938	11.6
1997*	17,989	18,630	7,705	2,852	1,055	1,220	188	49,639	501,691	10.1

Figure 19-1b **Percent of Discharges**

	Length of Stay in Days							Total
	1-4	5-10	11-20	21-30	31-40	41-100	> 100	
1990	21.5	29.0	22.5	11.4	5.2	8.3	2.0	100
1991	22.2	31.4	21.9	10.6	4.9	7.4	1.6	100
1992	22.8	32.7	21.4	10.0	4.7	7.1	1.3	100
1993	23.2	33.8	21.4	9.5	4.3	6.5	1.3	100
1994	24.1	34.8	21.1	9.3	4.1	5.6	1.0	100
1995	27.2	36.2	20.3	8.1	3.5	4.2	0.6	100
1996	30.4	37.6	18.4	7.2	2.8	3.2	0.4	100
1997*	36.2	37.5	15.5	5.7	2.1	2.5	0.4	100

\* Data for 1997 are estimated to be 95 percent complete.

Figure 19-2

## HIV / AIDS Hospital Discharges and Length of Stay

New York State, 1990 - 1997\*

Figure 19-2a **Hospital Discharges by Year**

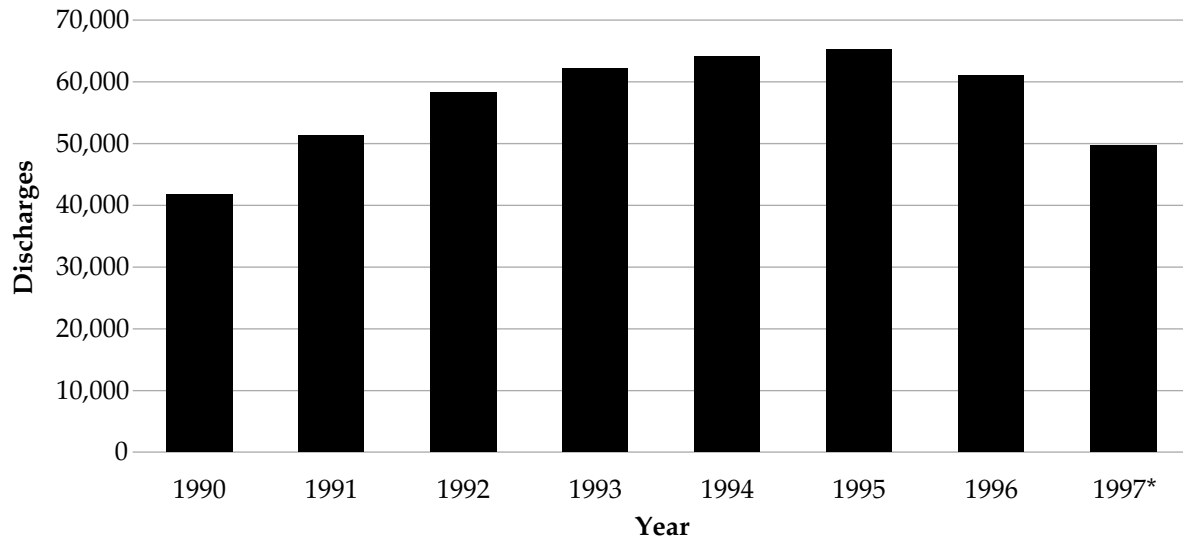
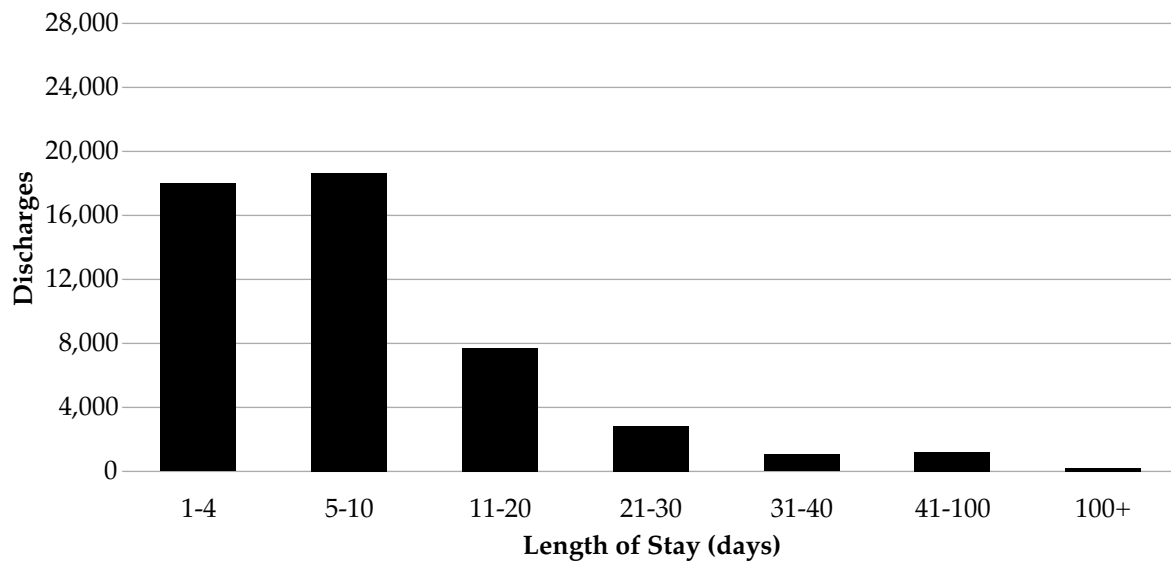


Figure 19-2b **Patient Length of Stay, 1997**



\* Data for 1997 are estimated to be 95 percent complete.



Figure 19-3

# HIV / AIDS Average Daily Inpatient Census

New York State, 1990 - 1997\*

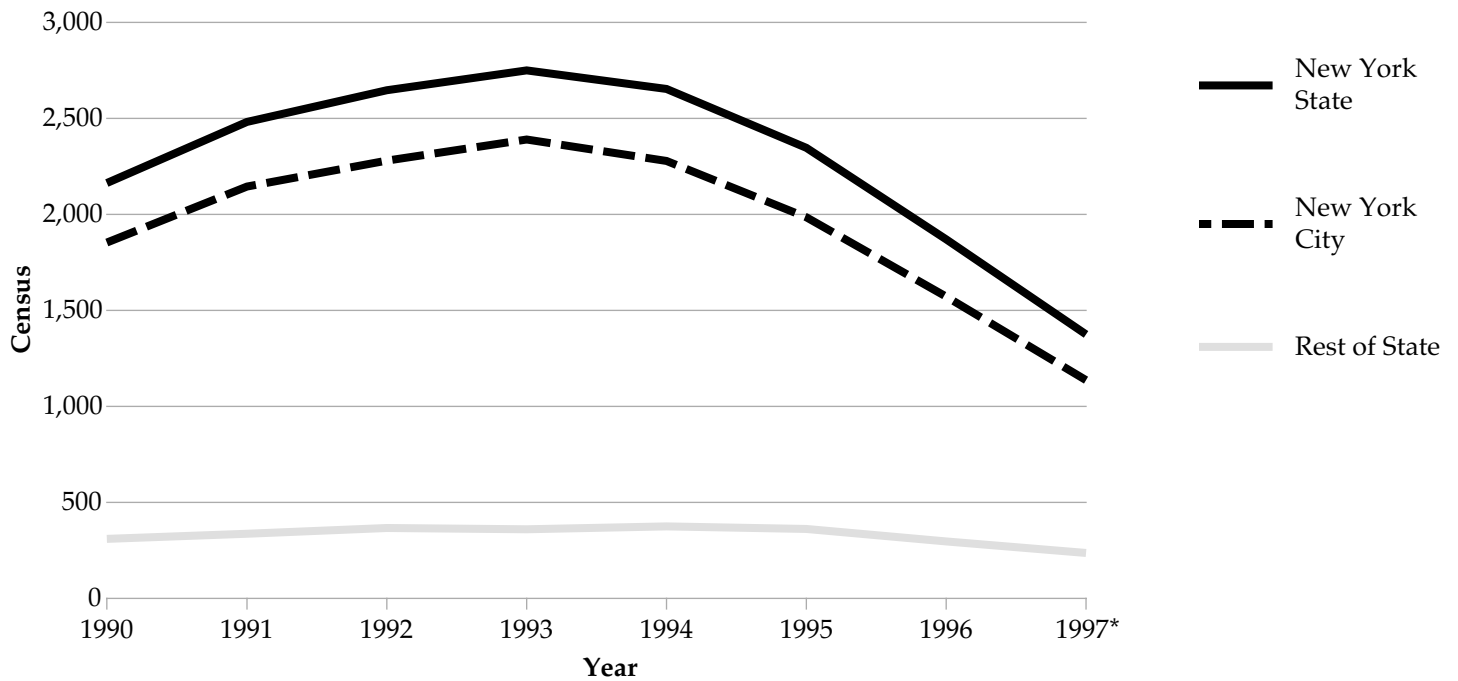
Location/Year	HIV/AIDS Average Daily Census	Total Average Daily Census	HIV/AIDS Percent of Total Census	HIV/AIDS Days
<b>New York City</b>				
1990	1,853	30,154	6.1	676,298
1991	2,145	30,690	7.0	782,813
1992	2,280	30,272	7.5	834,511
1993	2,390	29,593	8.1	872,340
1994	2,265	27,405	8.3	826,712
1995	1,964	24,993	7.9	717,014
1996	1,630	23,313	7.0	596,457
1997*	1,137	20,499	5.5	415,086
<b>Rest of State</b>				
1990	310	30,276	1.0	113,212
1991	336	30,336	1.1	122,655
1992	366	29,871	1.2	133,973
1993	360	29,057	1.2	131,267
1994	366	26,922	1.4	133,546
1995	354	25,989	1.4	129,060
1996	305	24,060	1.3	111,481
1997*	237	21,977	1.1	86,605
<b>New York State Total</b>				
1990	2,163	60,430	3.6	789,510
1991	2,481	61,026	4.1	905,468
1992	2,646	60,143	4.4	968,484
1993	2,750	58,650	4.7	1,003,607
1994	2,631	54,327	4.8	960,258
1995	2,318	50,982	4.5	846,074
1996	1,934	47,373	4.1	707,938
1997*	1,374	42,476	3.2	501,69

\* Data for 1997 are estimated to be 95 percent complete.

Figure 19-3

## HIV / AIDS Average Daily Inpatient Census

New York State, 1990 - 1997\*



\* Data for 1997 are estimated to be 95 percent complete.

Figure 19-4

# Pediatric HIV / AIDS Hospital Discharges, Days and Length of Stay by Year and Region

New York State, 1990 - 1997\*

Age (years)		Discharges			Days			Average Length of Stay		
		NYC	Rest of State	NYS	NYC	Rest of State	NYS	NYC	Rest of State	NYS
1990	< 1	504	69	573	10,148	2,067	12,215	20.1	30.0	21.3
	1 - 4	716	106	822	7,448	876	8,324	10.4	8.3	10.1
	5 - 9	391	69	460	3,229	521	3,750	8.3	7.6	8.2
	10 - 12	76	18	94	809	77	886	10.6	4.3	9.4
	<b>Total</b>	<b>1,687</b>	<b>262</b>	<b>1,949</b>	<b>21,634</b>	<b>3,541</b>	<b>25,175</b>	<b>12.8</b>	<b>13.5</b>	<b>12.9</b>
1991	< 1	473	66	539	7,898	1,290	9,188	16.7	19.5	17.0
	1 - 4	677	158	835	6,302	1,433	7,735	9.3	9.1	9.3
	5 - 9	385	58	443	3,869	510	4,379	10.0	8.8	9.9
	10 - 12	61	17	78	753	98	851	12.3	5.8	10.9
	<b>Total</b>	<b>1,596</b>	<b>299</b>	<b>1,895</b>	<b>18,822</b>	<b>3,331</b>	<b>22,153</b>	<b>11.8</b>	<b>11.1</b>	<b>11.7</b>
1992	< 1	420	88	508	7,171	1,578	8,749	17.1	17.9	17.2
	1 - 4	801	159	960	6,189	1,757	7,946	7.7	11.1	8.3
	5 - 9	407	82	489	4,294	987	5,281	10.6	12.0	10.8
	10 - 12	78	23	101	606	144	750	7.8	6.3	7.4
	<b>Total</b>	<b>1,706</b>	<b>352</b>	<b>2,058</b>	<b>18,260</b>	<b>4,466</b>	<b>22,726</b>	<b>10.7</b>	<b>12.7</b>	<b>11.0</b>
1993	< 1	371	59	430	7,150	869	8,019	19.3	14.7	18.6
	1 - 4	748	147	895	6,660	1,208	7,868	8.9	8.2	8.8
	5 - 9	442	122	564	3,267	1,449	4,716	7.4	11.9	8.4
	10 - 12	104	42	146	1,104	443	1,547	10.6	10.5	10.6
	<b>Total</b>	<b>1,665</b>	<b>370</b>	<b>2,035</b>	<b>18,181</b>	<b>3,969</b>	<b>22,150</b>	<b>10.9</b>	<b>10.7</b>	<b>10.9</b>
1994	< 1	324	48	372	5,176	576	5,752	16.0	12.0	15.5
	1 - 4	746	119	865	6,730	1,373	8,103	9.0	11.5	9.4
	5 - 9	443	111	554	4,112	1,121	5,233	9.3	10.1	9.4
	10 - 12	139	35	174	1,163	273	1,436	8.4	7.8	8.3
	<b>Total</b>	<b>1,652</b>	<b>313</b>	<b>1,965</b>	<b>17,181</b>	<b>3,343</b>	<b>20,524</b>	<b>10.4</b>	<b>10.7</b>	<b>10.4</b>
1995	< 1	299	35	334	4,200	526	4,726	14.0	15.0	14.1
	1 - 4	590	101	691	4,696	1,155	5,851	8.0	11.4	8.5
	5 - 9	458	110	568	3,530	745	4,275	7.7	6.8	7.5
	10 - 12	179	41	220	1,611	318	1,929	9.0	7.8	8.8
	<b>Total</b>	<b>1,526</b>	<b>287</b>	<b>1,813</b>	<b>14,037</b>	<b>2,744</b>	<b>16,781</b>	<b>9.2</b>	<b>9.6</b>	<b>9.3</b>
1996	< 1	251	37	288	3,099	1,185	4,284	12.3	32.0	14.9
	1 - 4	523	90	613	3,882	1,367	5,249	7.4	15.2	8.6
	5 - 9	468	89	557	4,092	711	4,803	8.7	8.0	8.6
	10 - 12	173	32	205	1,653	278	1,931	9.6	8.7	9.4
	<b>Total</b>	<b>1,415</b>	<b>248</b>	<b>1,663</b>	<b>12,726</b>	<b>3,541</b>	<b>16,267</b>	<b>9.0</b>	<b>14.3</b>	<b>9.8</b>
1997*	< 1	219	29	248	3,016	557	3,573	13.8	19.2	14.4
	1 - 4	337	58	395	2,708	397	3,105	8.0	6.8	7.9
	5 - 9	346	77	423	2,319	441	2,760	6.7	5.7	6.5
	10 - 12	130	46	176	1,165	371	1,536	9.0	8.1	8.7
	<b>Total</b>	<b>1,032</b>	<b>210</b>	<b>1,242</b>	<b>9,208</b>	<b>1,766</b>	<b>10,974</b>	<b>8.9</b>	<b>8.4</b>	<b>8.8</b>

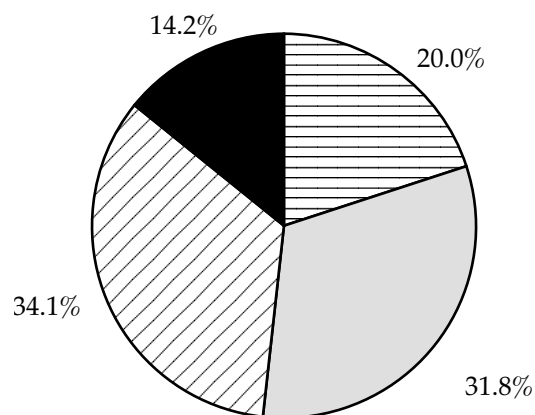
\*Data for 1997 are estimated to be 95 percent complete.

Figure 19-5

# Pediatric HIV / AIDS Hospitalizations by Age, Length of Stay and Percent of Days

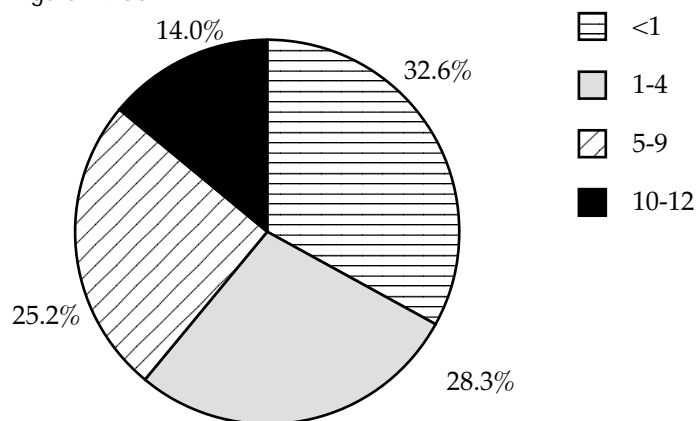
New York State, 1997

Figure 19-5a



**Percent Discharges  
by Age**

Figure 19-5b



**Percent Hospital  
Days by Age**

Figure 19-5c

**Length of Stay by Age**

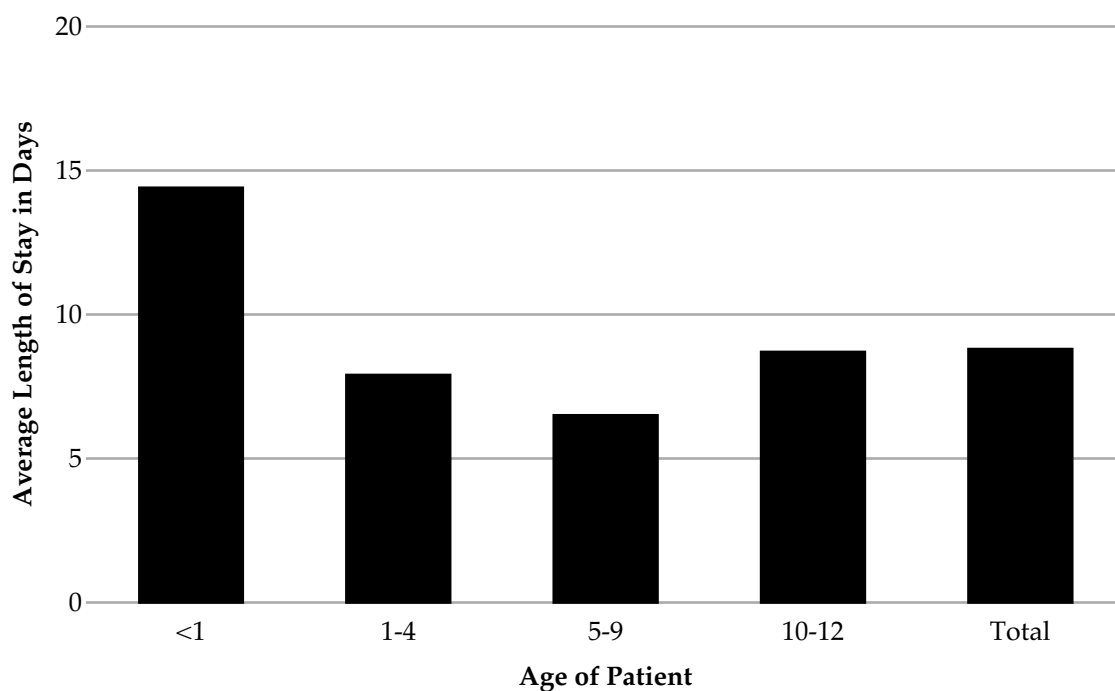


Figure 19-6

# HIV / AIDS Tuberculosis Hospitalizations and Length of Stay

New York State, 1990 - 1997\*

	Year	HIV/AIDS TB Discharges	TB Discharges as % of all HIV/AIDS Discharges	HIV/AIDS TB Discharges Average Length of Stay
<b>New York City</b>	1990	3,984	11.6	30.4
	1991	4,809	11.3	28.3
	1992	5,876	12.1	27.9
	1993	4,869	9.4	28.7
	1994	3,870	7.3	26.1
	1995	3,081	5.7	23.7
	1996	2,183	4.4	23.7
	1997*	1,233	3.1	22.8
<b>Rest of State</b>	1990	265	3.6	27.2
	1991	279	3.2	20.8
	1992	391	4.0	21.2
	1993	363	3.5	21.4
	1994	270	2.5	23.7
	1995	225	1.9	20.0
	1996	199	1.8	17.3
	1997*	112	1.2	26.7
<b>New York State Total</b>	1990	4,249	10.2	30.2
	1991	5,088	9.9	27.9
	1992	6,267	10.8	27.5
	1993	5,232	8.4	28.2
	1994	4,140	6.5	25.9
	1995	3,306	5.1	23.4
	1996	2,382	3.9	23.1
	1997*	1,345	2.7	23.1

\*Data for 1997 are estimated to be 95 percent complete.

Figure 19-7

## HIV / AIDS Hospitalizations of Patients with Tuberculosis

New York City, 1990 - 1997\*

Figure 19-7a **Percent of New York City HIV/AIDS Hospital Discharges with TB**

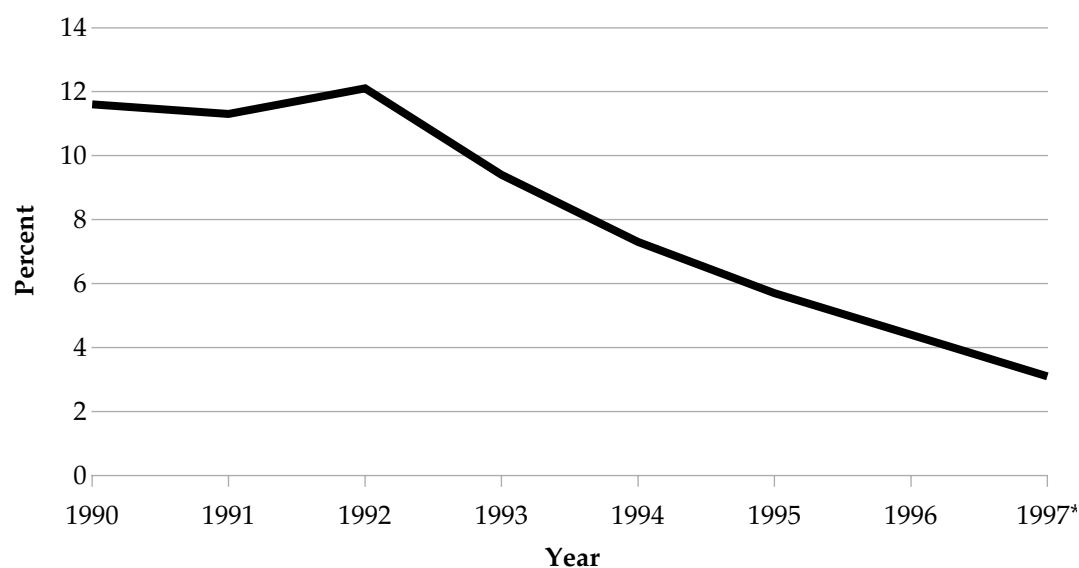
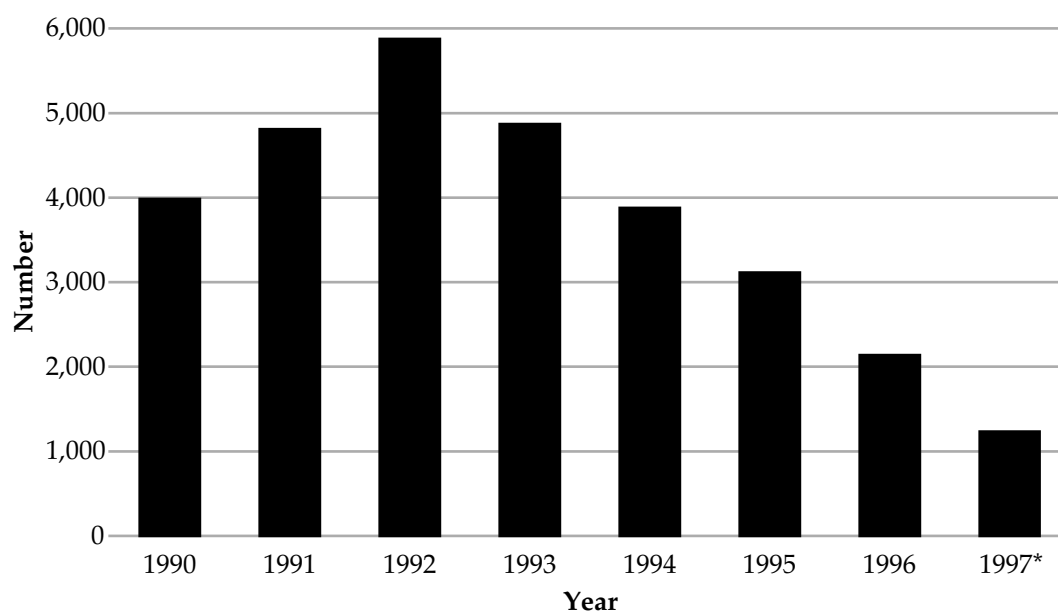


Figure 19-7b **Number of New York City HIV/AIDS Hospital Discharges with TB**



\* Data for 1997 are estimated to be 95 percent complete.

Figure 19-8

# HIV / AIDS Inpatient Statistics by Hospital Location

New York State, 1990 - 1997\*

Location		HIV/AIDS Discharges	HIV/AIDS Discharges as % of Total	HIV/AIDS Hospital Days	HIV/AIDS Days as % of Total	Average Length of Stay	Average Daily Census
1990	New York City	34,388	82.3	676,298	85.7	19.7	1,853
	Bronx	5,696	13.6	106,361	13.5	18.7	291
	Manhattan	19,214	46.0	377,984	47.9	19.7	1,036
	Brooklyn	5,899	14.1	124,288	15.7	21.1	341
	Queens	2,704	6.5	55,649	7.0	20.6	152
	Staten Island	875	2.1	12,016	1.5	13.7	33
	Rest of State	7,409	17.7	113,212	14.3	15.3	310
	<b>State Total</b>	<b>41,797</b>	<b>100.0</b>	<b>789,510</b>	<b>100.0</b>	<b>18.9</b>	<b>2,163</b>
1991	New York City	42,602	83.0	782,813	86.5	18.4	2,145
	Bronx	7,723	15.0	128,666	14.2	16.7	353
	Manhattan	22,695	44.2	429,527	47.4	18.9	1,177
	Brooklyn	7,434	14.5	146,734	16.2	19.7	402
	Queens	3,293	6.4	62,288	6.9	18.9	171
	Staten Island	1,457	2.8	15,598	1.7	10.7	43
	Rest of State	8,720	17.0	122,655	13.5	14.1	336
	<b>State Total</b>	<b>51,322</b>	<b>100.0</b>	<b>905,468</b>	<b>100.0</b>	<b>17.6</b>	<b>2,481</b>
1992	New York City	48,508	83.2	834,511	86.2	17.2	2,280
	Bronx	9,034	15.5	135,545	14.0	15.0	370
	Manhattan	25,331	43.5	453,460	46.8	17.9	1,239
	Brooklyn	8,581	14.7	159,156	16.4	18.5	435
	Queens	3,921	6.7	68,901	7.1	17.6	188
	Staten Island	1,641	2.8	17,449	1.8	10.6	48
	Rest of State	9,783	16.8	133,973	13.8	13.7	366
	<b>State Total</b>	<b>58,291</b>	<b>100.0</b>	<b>968,484</b>	<b>100.0</b>	<b>16.6</b>	<b>2,646</b>
1993	New York City	51,796	83.3	872,340	86.9	16.8	2,390
	Bronx	10,258	16.5	153,260	15.3	14.9	420
	Manhattan	26,169	42.1	468,045	46.6	17.9	1,282
	Brooklyn	9,326	15.0	167,466	16.7	18.0	459
	Queens	4,243	6.8	65,253	6.5	15.4	179
	Staten Island	1,800	2.9	18,316	1.8	10.2	50
	Rest of State	10,357	16.7	131,267	13.1	12.7	360
	<b>State Total</b>	<b>62,153</b>	<b>100.0</b>	<b>1,003,607</b>	<b>100.0</b>	<b>16.1</b>	<b>2,750</b>

## HIV / AIDS Inpatient Statistics by Hospital Location (continued)

	Location	HIV/AIDS Discharges	HIV/AIDS Discharges as % of Total	HIV/AIDS Hospital Days	HIV/AIDS Days as % of Total	Average Length of Stay	Average Daily Census
1994	New York City	53,241	83.1	826,712	86.1	15.5	2,265
	Bronx	10,865	16.9	151,026	15.7	13.9	414
	Manhattan	25,376	39.6	426,961	44.5	16.8	1,170
	Brooklyn	10,297	16.1	162,483	16.9	15.8	445
	Queens	4,511	7.0	65,644	6.8	14.6	180
	Staten Island	2,192	3.4	20,598	2.1	9.4	56
	Rest of State	10,862	16.9	133,546	13.9	12.3	366
	<b>State Total</b>	<b>64,103</b>	<b>100.0</b>	<b>960,258</b>	<b>100.0</b>	<b>15.0</b>	<b>2,631</b>
1995	New York City	53,643	82.2	717,014	84.7	13.4	1,964
	Bronx	11,443	17.5	137,262	16.2	12.0	376
	Manhattan	24,810	38.0	365,372	43.2	14.7	1,001
	Brooklyn	10,788	16.5	140,744	16.6	13.0	386
	Queens	4,467	6.8	54,999	6.5	12.3	151
	Staten Island	2,135	3.3	18,637	2.2	8.7	51
	Rest of State	11,615	17.8	129,060	15.3	11.1	354
	<b>State Total</b>	<b>65,258</b>	<b>100.0</b>	<b>846,074</b>	<b>100.0</b>	<b>13.0</b>	<b>2,318</b>
1996	New York City	50,089	82.1	596,457	84.3	11.9	1,630
	Bronx	10,980	18.0	113,585	16.0	10.3	310
	Manhattan	22,844	37.4	304,414	43.0	13.3	832
	Brooklyn	10,117	16.6	119,651	16.9	11.8	327
	Queens	4,190	6.9	43,050	6.1	10.3	118
	Staten Island	1,958	3.2	15,757	2.2	8.0	43
	Rest of State	10,932	17.9	111,481	15.7	10.2	305
	<b>State Total</b>	<b>61,021</b>	<b>100.0</b>	<b>707,938</b>	<b>100.0</b>	<b>11.6</b>	<b>1,934</b>
1997*	New York City	40,162	80.9	415,086	82.7	10.3	1,137
	Bronx	9,113	18.4	84,608	16.9	9.3	232
	Manhattan	17,769	35.8	205,079	40.9	11.5	562
	Brooklyn	7,936	16.0	79,011	15.7	10.0	216
	Queens	3,379	6.8	30,897	6.2	9.1	85
	Staten Island	1,965	4.0	15,491	3.1	7.9	42
	Rest of State	9,477	19.1	86,605	17.3	9.1	237
	<b>State Total</b>	<b>49,639</b>	<b>100.0</b>	<b>501,691</b>	<b>100.0</b>	<b>10.1</b>	<b>1,374</b>

\*Data for 1997 are estimated to be 95 percent complete.



Figure 19-9

## HIV / AIDS Inpatient Statistics by Hospital Location

New York State, 1997

Figure 19-9a **Percent of HIV/AIDS Total Discharges**

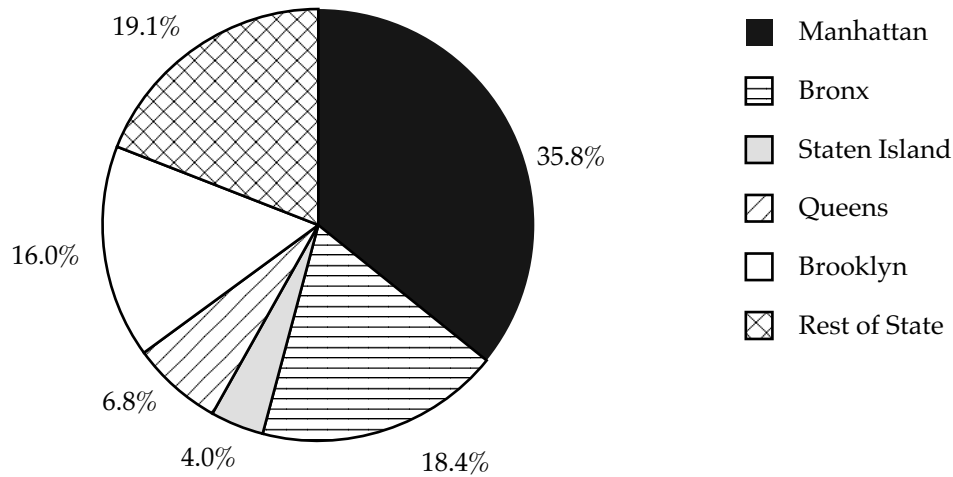


Figure 19-9b **HIV/AIDS Average Length of Stay**

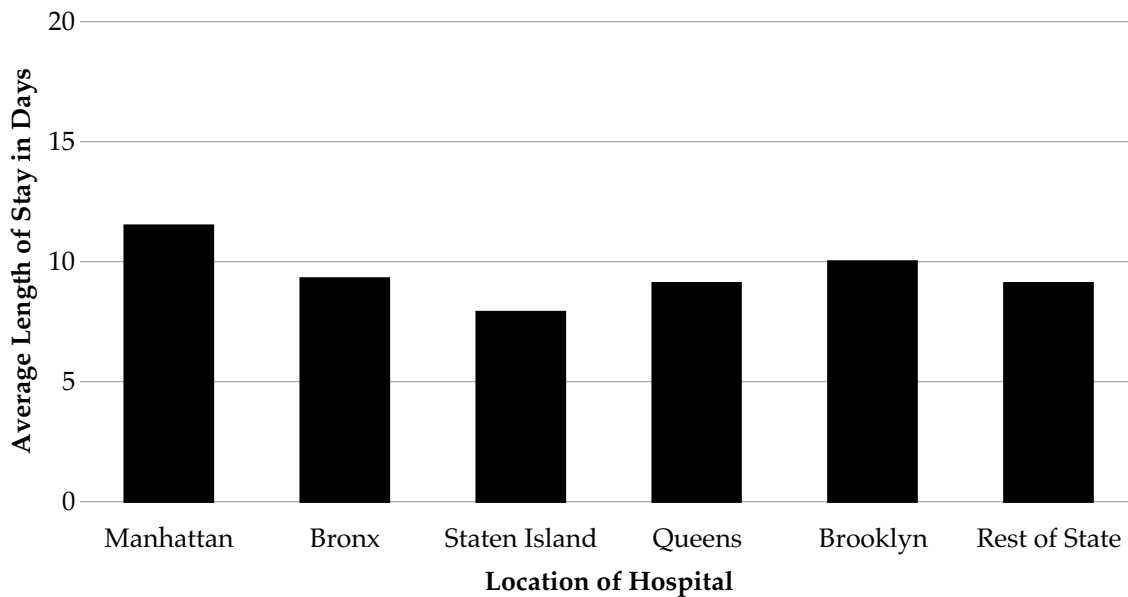


Figure 19-10

# HIV / AIDS Inpatient Statistics by Hospital Auspice

New York State, 1990 - 1997\*

		Discharges	Discharges as % of HIV/AIDS Total	Days	Days as % of HIV/AIDS Total	Average Length of Stay	HIV/AIDS Days as % of all Hospital Days
Auspice							
1990	Proprietary	375	0.9	4,452	0.6	11.9	0.57
	Voluntary	29,935	71.6	525,575	66.6	17.6	2.99
	Public	11,487	27.5	259,483	32.9	22.6	7.03
	<b>Total</b>	<b>41,797</b>	<b>100.0</b>	<b>789,510</b>	<b>100.0</b>	<b>18.9</b>	<b>3.58</b>
1991	Proprietary	536	1.0	5,609	0.6	10.5	0.74
	Voluntary	36,438	71.0	587,473	64.9	16.1	3.31
	Public	14,348	28.0	312,386	34.5	21.8	8.35
	<b>Total</b>	<b>51,322</b>	<b>100.0</b>	<b>905,468</b>	<b>100.0</b>	<b>17.6</b>	<b>4.07</b>
1992	Proprietary	785	1.3	7,491	0.8	9.5	1.03
	Voluntary	41,739	71.6	639,297	66.0	15.3	3.63
	Public	15,767	27.0	321,696	33.2	20.4	8.74
	<b>Total</b>	<b>58,291</b>	<b>100.0</b>	<b>968,484</b>	<b>100.0</b>	<b>16.6</b>	<b>4.40</b>
1993	Proprietary	874	1.4	7,669	0.8	8.8	1.16
	Voluntary	44,174	71.1	656,653	65.4	14.9	3.84
	Public	17,105	27.5	339,285	33.8	19.8	9.25
	<b>Total</b>	<b>62,153</b>	<b>100.0</b>	<b>1,003,607</b>	<b>100.0</b>	<b>16.1</b>	<b>4.69</b>
1994	Proprietary	459	0.7	5,326	0.6	11.6	0.86
	Voluntary	46,445	72.5	634,224	66.0	13.7	4.01
	Public	17,199	26.8	320,708	33.4	18.6	9.43
	<b>Total</b>	<b>64,103</b>	<b>100.0</b>	<b>960,258</b>	<b>100.0</b>	<b>15.0</b>	<b>4.84</b>
1995	Proprietary	524	0.8	5,459	0.6	10.4	1.1
	Voluntary	47,865	73.3	568,251	67.2	11.9	3.78
	Public	16,869	25.8	272,364	32.2	16.1	8.78
	<b>Total</b>	<b>65,258</b>	<b>100.0</b>	<b>846,074</b>	<b>100.0</b>	<b>13.0</b>	<b>4.55</b>
1996	Proprietary	623	1.0	4,870	0.7	7.8	1.06
	Voluntary	45,358	74.3	481,699	68.0	10.6	3.43
	Public	15,040	24.6	221,369	31.3	14.7	7.78
	<b>Total</b>	<b>61,021</b>	<b>100.0</b>	<b>707,938</b>	<b>100.0</b>	<b>11.6</b>	<b>4.08</b>
1997*	Proprietary	552	1.1	3,857	0.8	7.0	0.95
	Voluntary	36,573	73.7	333,012	66.4	9.1	2.66
	Public	12,514	25.2	164,822	32.9	13.2	6.42
	<b>Total</b>	<b>49,639</b>	<b>100.0</b>	<b>501,691</b>	<b>100.0</b>	<b>10.1</b>	<b>3.24</b>

\*Data for 1997 are estimated to be 95 percent complete.

Figure 19-11

## HIV / AIDS Inpatient Statistics by Hospital Auspice

New York State, 1990 - 1997

Figure 19-11a HIV/AIDS Discharges as Percent of Total Inpatient Days

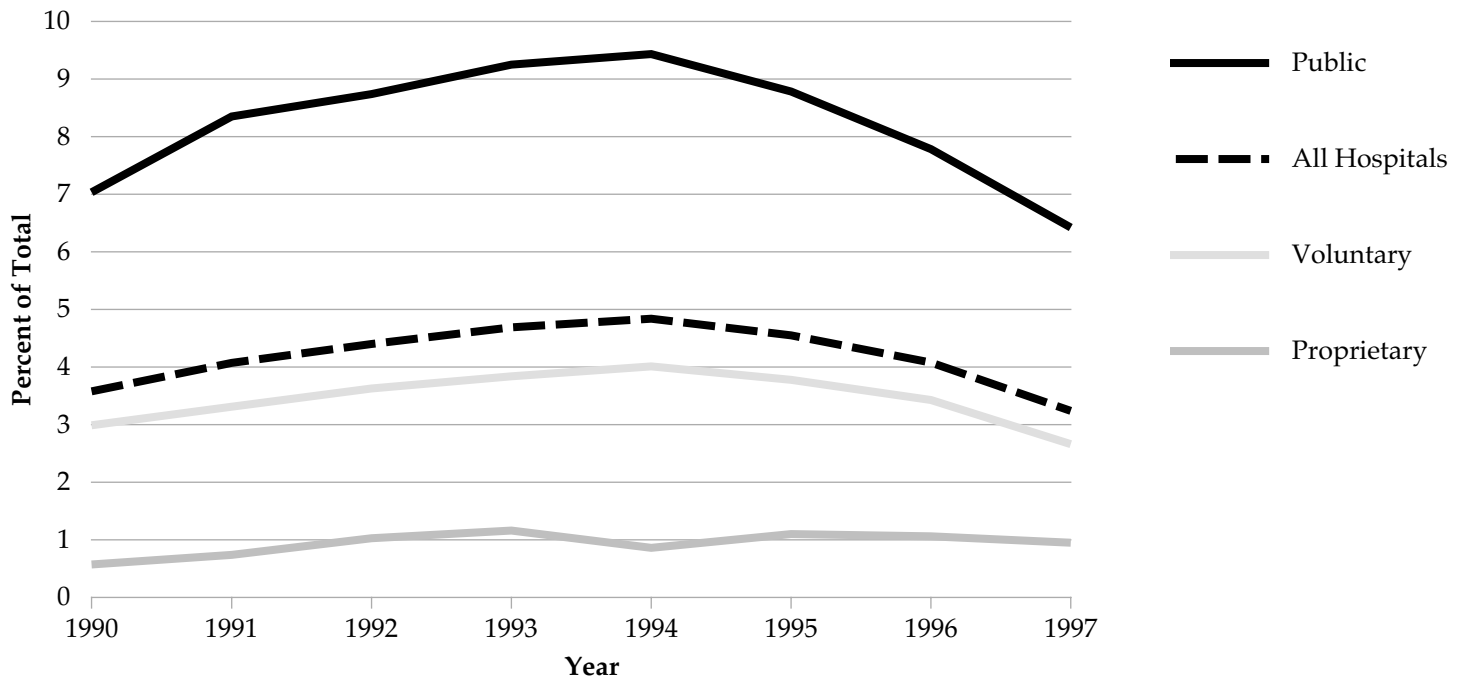


Figure 19-11b HIV/AIDS Average Length of Stay

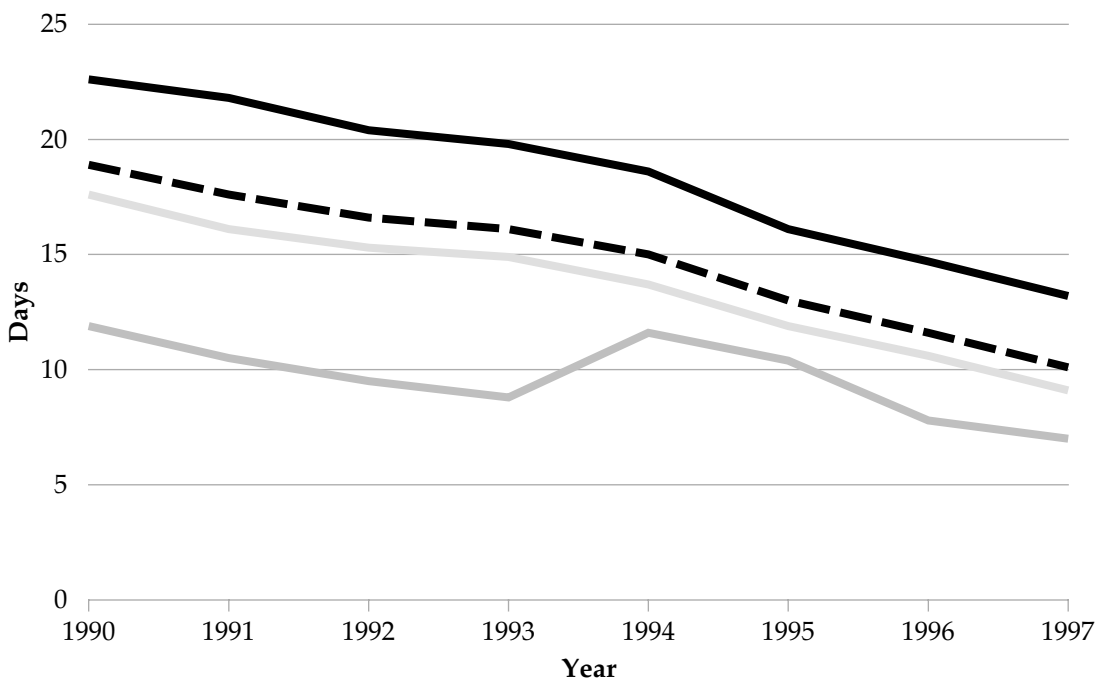


Figure 19-12

# HIV / AIDS Inpatient Statistics for Designated AIDS Centers, HHC\* Hospitals and Other Hospitals

New York State, 1990 - 1997‡

Location		Discharges	Discharges as % of HIV/AIDS Total	Days	Days as % of HIV/AIDS Total	Average Length of Stay	HIV/AIDS Days as % of all Hospital Days
1990	AIDS Centers (22†)	19,086	45.7	352,676	44.7	18.5	7.68
	HHC Hospitals	9,150	21.9	215,843	27.3	23.6	8.73
	Other Hospitals	13,561	32.4	220,991	28.0	16.3	1.47
	<b>Total</b>	<b>41,797</b>	<b>100.0</b>	<b>789,510</b>	<b>100.0</b>	<b>18.9</b>	<b>3.58</b>
1991	AIDS Centers (24†)	22,328	43.5	378,984	41.9	17.0	7.64
	HHC Hospitals	11,585	22.6	266,778	29.5	23.0	10.62
	Other Hospitals	17,409	33.9	259,706	28.7	14.9	1.75
	<b>Total</b>	<b>51,322</b>	<b>100.0</b>	<b>905,468</b>	<b>100.0</b>	<b>17.6</b>	<b>4.07</b>
1992	AIDS Centers (25†)	25,981	44.6	418,494	43.2	16.1	8.40
	HHC Hospitals	12,901	22.1	274,164	28.3	21.3	11.15
	Other Hospitals	19,409	33.3	275,826	28.5	14.2	1.89
	<b>Total</b>	<b>58,291</b>	<b>100.0</b>	<b>968,484</b>	<b>100.0</b>	<b>16.6</b>	<b>4.40</b>
1993	AIDS Centers (29†)	29,522	47.5	465,694	46.4	15.8	8.54
	HHC Hospitals	12,739	20.5	269,943	26.9	21.2	11.69
	Other Hospitals	19,892	32.0	267,970	26.7	13.5	1.96
	<b>Total</b>	<b>62,153</b>	<b>100.0</b>	<b>1,003,607</b>	<b>100.0</b>	<b>16.1</b>	<b>4.69</b>
1994	AIDS Centers (29†)	30,606	47.7	443,319	46.2	14.5	8.68
	HHC Hospitals	12,727	19.9	254,661	26.5	20.0	12.03
	Other Hospitals	20,770	32.4	262,278	27.3	12.6	2.08
	<b>Total</b>	<b>64,103</b>	<b>100.0</b>	<b>960,258</b>	<b>100.0</b>	<b>15.0</b>	<b>4.84</b>
1995	AIDS Centers (33†)	32,344	49.6	408,308	48.3	12.6	8.01
	HHC Hospitals	12,002	18.4	209,343	24.7	17.4	11.38
	Other Hospitals	20,912	32.0	228,423	27.0	10.9	1.96
	<b>Total</b>	<b>65,258</b>	<b>100.0</b>	<b>846,074</b>	<b>100.0</b>	<b>13.0</b>	<b>4.55</b>
1996	AIDS Centers (33†)	30,158	49.4	339,680	48.0	11.3	7.06
	HHC Hospitals	10,853	17.8	172,304	24.3	15.9	10.24
	Other Hospitals	20,010	32.8	195,954	27.7	9.8	1.81
	<b>Total</b>	<b>61,021</b>	<b>100.0</b>	<b>707,938</b>	<b>100.0</b>	<b>11.6</b>	<b>4.08</b>
1997‡	AIDS Centers	23,700	47.7	224,103	44.7	9.5	5.19
	HHC Hospitals	9,047	18.2	128,537	25.6	14.2	8.66
	Other Hospitals	16,892	34.0	149,051	29.7	8.8	1.54
	<b>Total</b>	<b>49,639</b>	<b>100.0</b>	<b>501,691</b>	<b>100.0</b>	<b>10.1</b>	<b>3.24</b>

\* HHC - New York City Health and Hospitals Corporation.

† Number of Designated AIDS Center hospitals.

‡ Data for 1997 are estimated to be 95 percent complete.

# HIV / AIDS Inpatient Statistics for Designated AIDS Centers, HHC Hospitals and Other Hospitals New York State, 1990 - 1997

Figure 19-12a HIV/AIDS as Percent of Total Inpatient Days

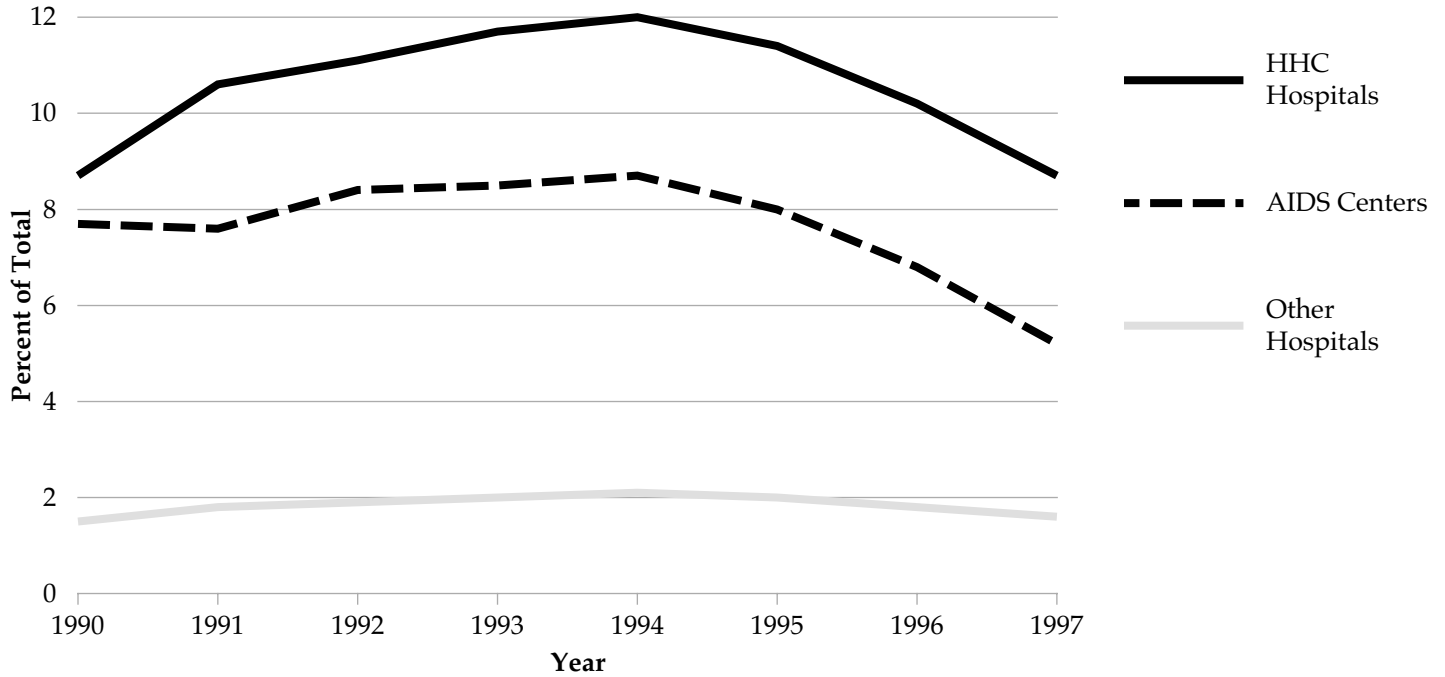


Figure 19-12b HIV/AIDS Average Length of Stay

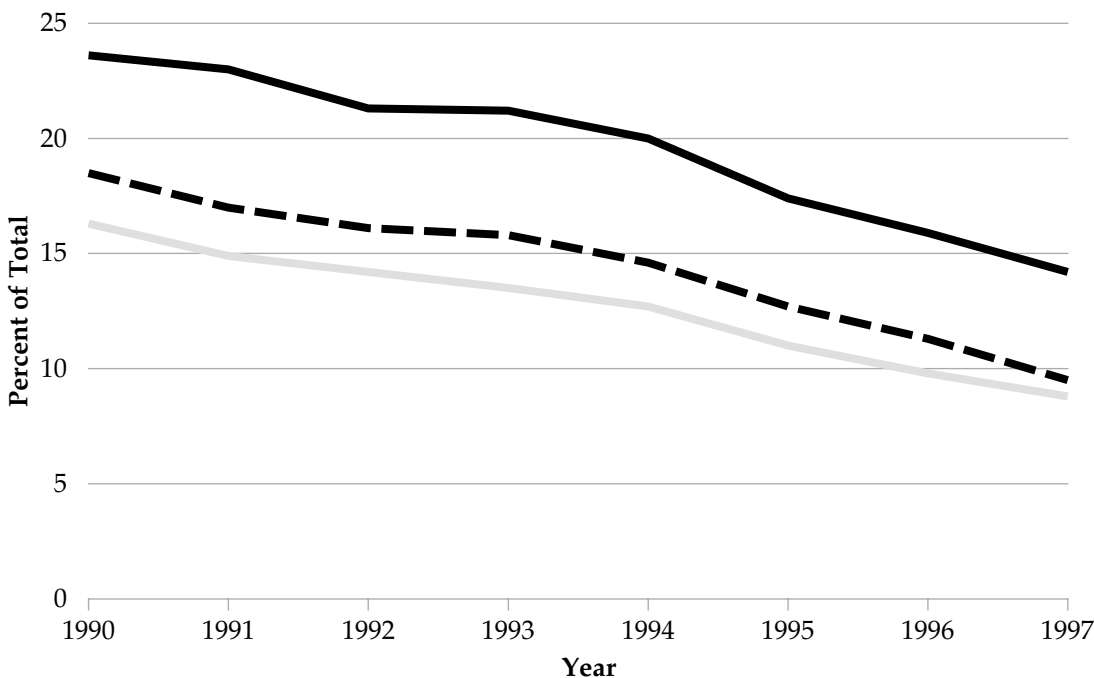


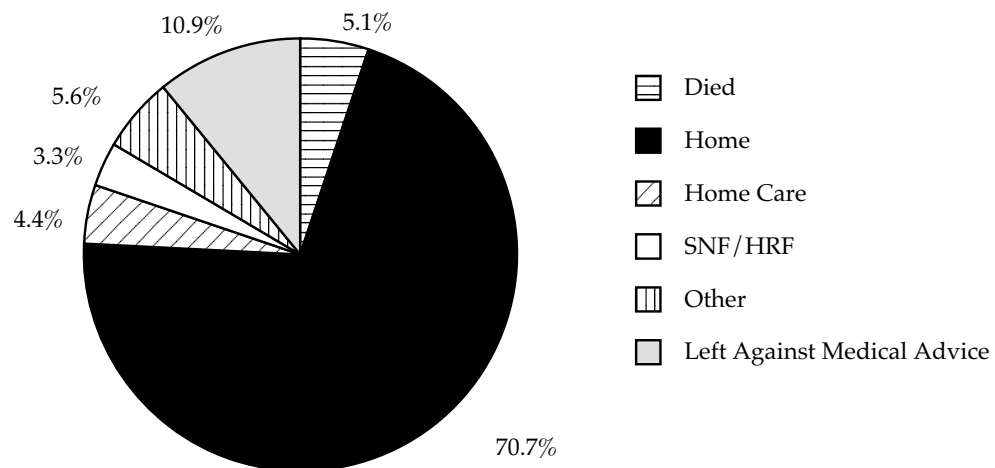
Figure 19-13

# HIV / AIDS Hospital Discharges by Disposition

New York State, 1990 - 1997\*

	Home	Other Acute Hospital†	Skilled Nursing Facility‡	Other Institutions§	Home Services	Left Against Medical Advice	Psychiatric Care	Died	Total
<b>Discharges</b>									
1990	29,116	426	209	1,390	1,063	3,991	126	5,476	41,797
1991	34,787	750	400	1,777	1,514	5,898	227	5,969	51,322
1992	38,085	778	600	2,265	2,343	7,866	209	6,145	58,291
1993	39,859	870	858	2,304	2,832	8,883	253	6,294	62,153
1994	41,955	783	1,317	2,249	2,932	8,361	112	6,394	64,103
1995	42,947	710	1,827	2,282	3,390	8,052	47	6,003	65,258
1996	41,519	783	2,003	2,464	2,928	6,856	33	4,435	61,021
1997*	35,089	605	1,649	2,139	2,188	5,402	52	2,515	49,639
<b>Percent of Discharges</b>									
1990	69.7	1.0	0.5	3.3	2.5	9.5	0.3	13.1	100.0
1991	67.8	1.5	0.8	3.5	3.0	11.5	0.4	11.6	100.0
1992	65.3	1.3	1.0	3.9	4.0	13.5	0.4	10.5	100.0
1993	64.1	1.4	1.4	3.7	4.6	14.3	0.4	10.1	100.0
1994	65.4	1.2	2.1	3.5	4.6	13.0	0.2	10.0	100.0
1995	65.8	1.1	2.8	3.5	5.2	12.3	0.1	9.2	100.0
1996	68.0	1.3	3.3	4.0	4.8	11.2	0.1	7.3	100.0
1997*	70.7	1.2	3.3	4.3	4.4	10.9	0.1	5.1	100.0

## HIV/AIDS Hospital Discharges by Disposition – New York State, 1997



\* Data for 1997 are estimated to be 95 percent complete.

† Includes neonatal after care and other acute and tertiary care facilities.

‡ Includes skilled nursing facility (SNF), intermediate care facility and domiciliary care facility.

§ Includes home services and home IV.

Figure 19-14

# HIV / AIDS Hospitalizations by Primary Expected Payor by Year

New York State, 1990 - 1997\*

	Self Pay	Medicare	Medicaid	Blue Cross	Commercial	No Charge	Other	Total
<b>Discharges</b>								
1990	2,529	2,092	24,936	6,773	2,652	741	2,074	41,797
1991	2,836	2,912	32,100	6,925	3,253	924	2,372	51,322
1992	2,944	4,127	38,049	6,372	3,433	795	2,571	58,291
1993	3,472	5,608	40,996	5,551	3,084	771	2,671	62,153
1994	2,270	6,441	43,762	4,842	3,246	24	3,518	64,103
1995	3,559	7,641	42,339	4,066	3,344	20	4,289	65,258
1996	3,537	7,926	40,647	2,619	2,416	261	3,615	61,021
1997*	2,694	6,734	33,945	1,587	1,742	189	2,748	49,639
<b>Percent of Discharges</b>								
1990	6.1	5.0	59.7	16.2	6.3	1.8	5.0	100
1991	5.5	5.7	62.5	13.5	6.3	1.8	4.6	100
1992	5.1	7.1	65.3	10.9	5.9	1.4	4.4	100
1993	5.6	9.0	66.0	8.9	5.0	1.2	4.3	100
1994	3.5	10.0	68.3	7.6	5.1	0.0	5.5	100
1995	5.5	11.7	64.9	6.2	5.1	0.0	6.6	100
1996	5.8	13.0	66.6	4.3	4.0	0.4	5.9	100
1997*	5.4	13.6	68.4	3.2	3.5	0.4	5.5	100

\*Data for 1997 are estimated to be 95 percent complete.

# HIV / AIDS Hospitalizations by Primary Expected Payor by Year

New York State, 1990 - 1997

Figure 19-14a **Primary Expected Payor, 1997**

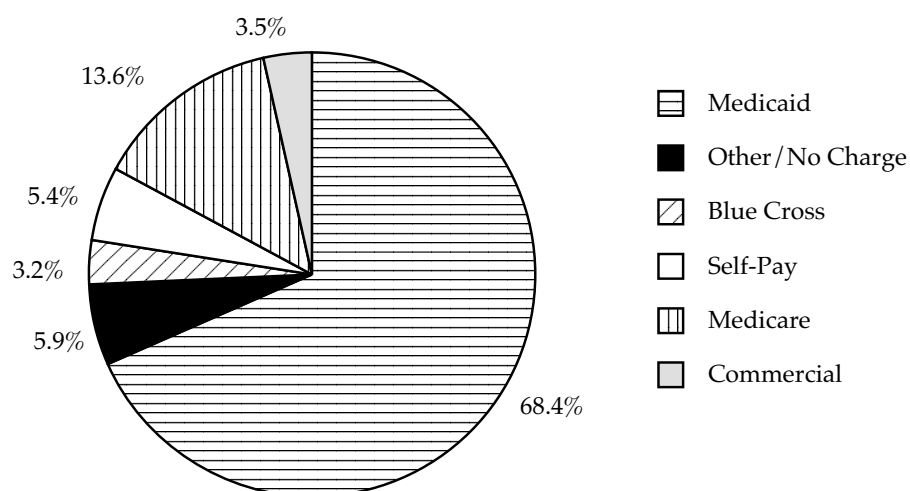
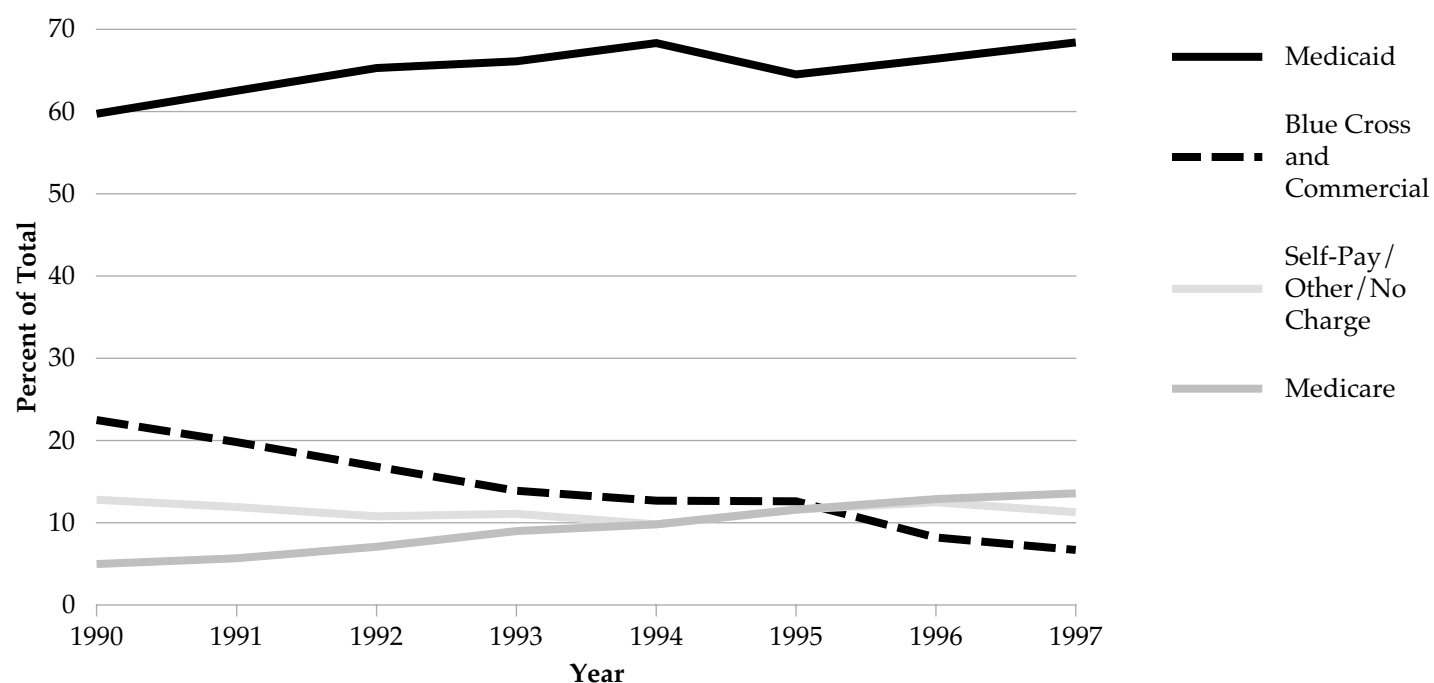


Figure 19-14b **Primary Expected Payor, 1990-1997**





# HIV / AIDS Related Costs and Expenditures in New York State

## Total Expenditures for Persons with HIV/AIDS

Estimated expenditures for persons with HIV / AIDS in New York State exceeded \$2.8 billion in 1997. The federal government accounted for nearly half of total HIV / AIDS-related expenditures, while New York State supported 23 percent of the total. Local governments absorbed 19 percent of total expenditures.

The cost of medical treatment of HIV / AIDS patients in 1997 exceeded \$2.0 billion. These costs encompass the full spectrum of health services including inpatient and outpatient care, residential long term care and AIDS related drugs.

Hospital inpatient care consumed the major share of AIDS medical treatment costs, representing 50 percent or \$1.0 billion. Ambulatory care (\$330 million) accounted for 16 percent of medical care costs. Payments for medications amounted to \$395 million, or about 19 percent of medical care costs (see Table 20-1).

Personal services for persons with HIV / AIDS were by far the largest component of total costs, accounting for \$2.5 billion or 88 percent of total expenditures in 1997. Public health expenditures make up the remaining 12 percent of the total (\$350 million). Research (\$145 million) comprised 42 percent of HIV / AIDS-related public health expenditures, and prevention and training efforts accounted for \$135 million, or 39 percent of public health expenditures (see Figure 20-2)

From 1987 to 1997, total estimated HIV / AIDS expenditures increased more than five-fold, rising from \$557 million to \$2.8 billion. During the period, personal service expenses grew from \$467 million to \$2.5 billion. Public health expenditures rose from \$90 million to \$350 million (see Figure 20-3).

## State Agency HIV/AIDS Funding

Projected New York State agency funding for AIDS-related programs and services amount to \$648.7 million in fiscal year 1998-99, up 3.3 percent from the previous year (see Figure 20-4). More than half of the increase is attributed to the Department of Corrections, which saw funding increase by \$12 million. These funds, which come mainly from federal government resources and NYS legislative appropriations, support medical treatment for persons with HIV / AIDS, including HIV counseling and testing, substance abuse treatment and mental health services. These funds also support a statewide network of community-based organizations that offer AIDS education and risk reduction programs and social support services for persons with HIV / AIDS and their family members. Housing assistance and other social services are also funded by the state.

## Medicaid HIV/AIDS Expenditures

Medicaid is the major source of payment for AIDS-related care.

Medicaid expenditures for patients with AIDS-related illness grew from \$117 million in 1986 to nearly \$1.5 billion in 1997, a twelve-fold increase. The growth of Medicaid recipients has kept pace. In 1997, just under 57,000 persons with HIV / AIDS obtained medical treatment through Medicaid, at an average cost per patient of \$25,500 (see Figures 20-5 and 20-6).

Hospital inpatient care is the single most expensive component of care for AIDS patients, accounting for 46 percent of all Medicaid expenditures (see Figure 20-7). Hospital inpatient care is also the most common medical service provided to these patients; 45 percent of all Medicaid recipients with HIV-related illness in 1997 had at least one hospital stay.

The Medicaid expenditure data reveal a shift in patterns of treatment for HIV / AIDS. In 1995, Medicaid spent \$763 million and \$94 million on inpatient care and pharmaceuticals, respectively. In 1997, the inpatient expenditures were 12 percent lower than in 1995, but pharmacy costs were 165 percent higher (\$250 million). Expenditures for HIV / AIDS-specific drugs, such as anti-retrovirals (e.g., AZT) and protease inhibitors, grew from just \$9 million in 1995 to \$112 million in 1997. In 1995, 27 percent of Medicaid HIV / AIDS recipients (12,400) received these drugs; by 1997, the proportion had grown to 58 percent (33,000 recipients).

Figure 20-1

# Estimated Total Expenditures for Persons with HIV / AIDS by Payor

New York State, 1997

	Federal	State	Local†	Other	Total
<b>Personal Service Expenditures</b>					
<b>Medical Treatment</b>					
Inpatient	480,820,000	197,720,000	167,440,000	199,280,000	1,045,260,000
Ambulatory	173,990,000	76,190,000	58,450,000	21,050,000	329,680,000
Long Term Care	92,500,000	93,800,000	24,180,000	8,810,000	219,290,000
Home Care	56,330,000	21,880,000	21,880,000	6,900,000	106,990,000
Medications	189,860,000	83,580,000	62,550,000	59,290,000	395,280,000
<b>Total Medical Treatment</b>	<b>993,500,000</b>	<b>473,170,000</b>	<b>334,500,000</b>	<b>295,330,000</b>	<b>2,096,500,000</b>
Social Services	89,120,000	65,270,000	145,570,000	*	299,960,000
Other	39,060,000	13,260,000	20,370,000	7,700,000	80,390,000
<b>Total Personal Service Expenditures</b>	<b>1,121,680,000</b>	<b>551,700,000</b>	<b>500,440,000</b>	<b>303,030,000</b>	<b>2,476,850,000</b>
<b>Public Health Expenditures</b>					
Prevention, Education, Training	33,430,000	87,830,000	14,040,000	*	135,300,000
HIV Testing: of individuals, blood supply and tissues; Counseling	14,120,000	10,270,000	2,710,000	*	27,100,000
Epidemiology, Surveillance	6,200,000	1,680,000	960,000	*	8,840,000
Administration, Planning, Regulation	24,770,000	3,540,000	5,440,000	*	33,750,000
Research	144,880,000	230,000	370,000	*	145,480,000
<b>Total Public Health Expenditures</b>	<b>223,400,000</b>	<b>103,550,000</b>	<b>23,520,000</b>	<b>*</b>	<b>350,470,000</b>
<b>Total</b>	<b>1,345,080,000</b>	<b>655,250,000</b>	<b>523,960,000</b>	<b>303,030,000</b>	<b>2,827,320,000</b>

Note:

“Personal Service Expenditure” relates to medical, social and other services delivered directly to individuals with HIV / AIDS. “Public Health Expenditures,” by contrast, are oriented toward costs of HIV prevention services and programs undertaken on behalf of at-risk populations, and include HIV surveillance, research and provider monitoring costs.

The methodology for estimating several personal expenditure categories was revised this year.

† Includes some, but not all, expenditures by local governments other than New York City.

\* Spending in these categories is unknown.

Figure 20-2

## Estimated Total Expenditures for Persons with HIV / AIDS

New York State, 1997

Figure 20-2a **AIDS Personal Services Expenditures**

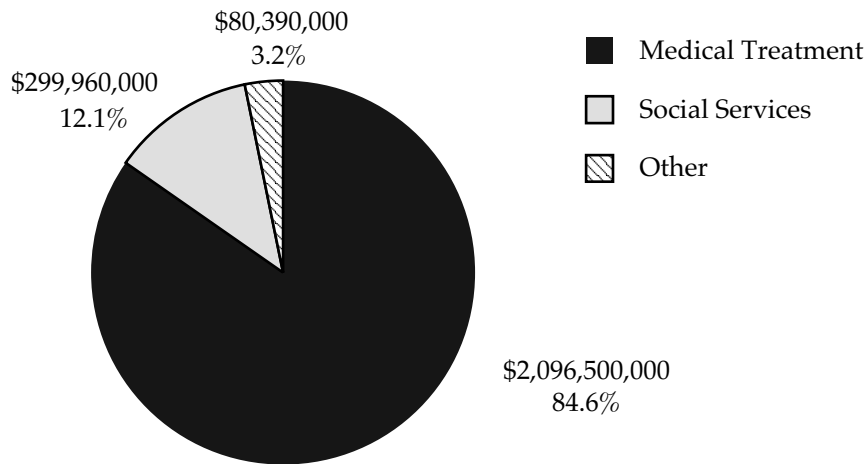


Figure 20-2b **AIDS Public Health Expenditures**

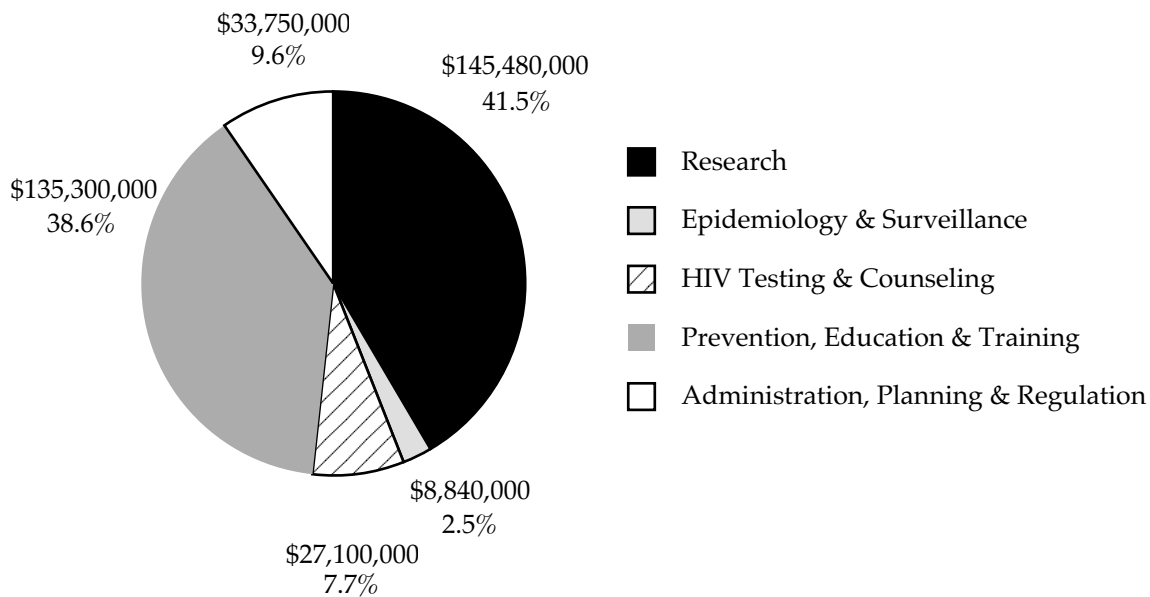
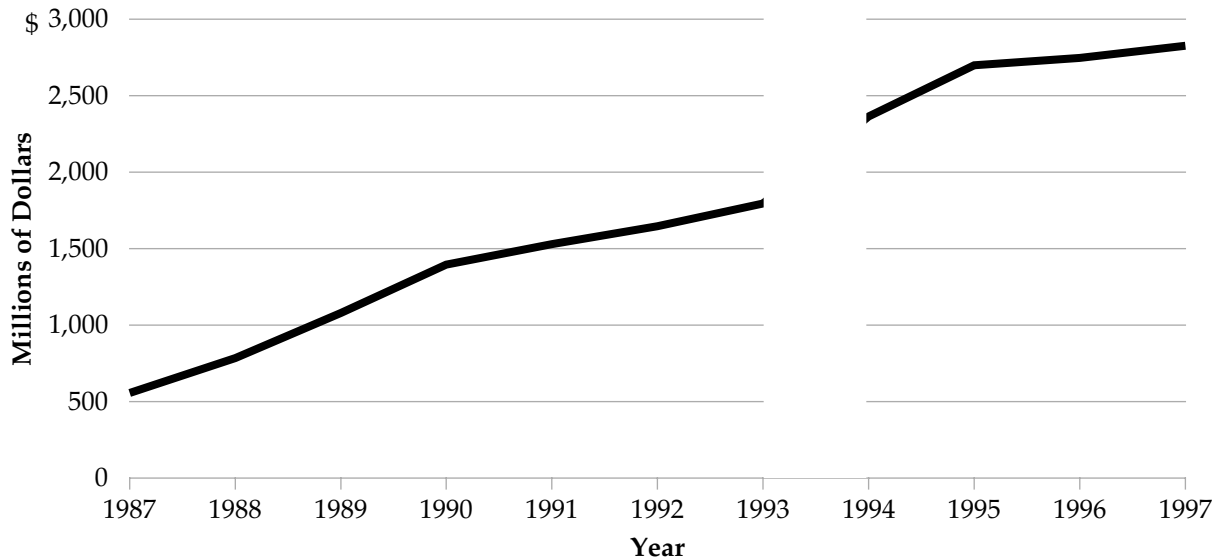


Figure 20-3

# Estimated Annual Expenditures for Persons with HIV / AIDS

New York State, 1987 - 1997\*

	Personal Services Expenditures		Public Health Expenditures		Total
	Amount	% of Total	Amount	% of Total	
1987*	\$466,930,000	84	\$89,990,000	16	\$556,920,000
1988*	647,850,000	82	137,970,000	18	785,820,000
1989*	865,720,000	80	213,700,000	20	1,079,420,000
1990*	1,129,220,000	81	267,130,000	19	1,396,350,000
1991*	1,291,920,000	84	238,780,000	16	1,530,700,000
1992*	1,406,500,000	85	241,450,000	15	1,647,950,000
1993*	1,540,140,000	86	255,980,000	14	1,796,120,000
1994	2,053,960,000	87	310,920,000	13	2,364,880,000
1995	2,411,430,000	89	287,920,000	11	2,699,350,000
1996	2,454,670,000	89	292,520,000	11	2,747,190,000
1997	2,476,850,000	88	350,470,000	12	2,827,320,000



\*The methodology used to estimate expenditures was revised this year and was used to develop the estimates for 1994-1997. The estimates shown for 1987-1993 are not directly comparable to those for 1994-1997.

Figure 20-4

# Estimated HIV / AIDS Funding by State Agency and Program New York State Funds\*

Fiscal Years 1997 - 1998 and 1998-1999

Program	(Millions of Dollars)	
	State Fiscal Year	
	1997-98	1998-99
<b>Department of Health</b>		
Medicaid	380.8	380.8
HIV Special Needs Plans	—	6.3
AIDS Institute	100.8	101.0
AIDS Drug Assistance Programs	12.0	12.0
Health Care Standards and Surveillance	1.7	1.7
<b>Office of Children and Family Services</b>	7.6	7.6
<b>Office of Temporary and Disability Assistance</b>		
Homeless Housing Assistance Program	5.0	5.0
Welfare to Work	1.4	1.4
Income Maintenance	40.0	42.0
<b>Office of Mental Health</b>		
Inpatient	0.9	0.9
Training	0.7	0.7
<b>Office of Alcoholism and Substance Abuse</b>		
Counseling and Education	4.3	4.3
Methadone	20.5	20.5
<b>Department of Correctional Services</b>	51.0	63.1
<b>Division of Parole</b>	0.4	0.4
<b>Department of Education</b>	1.0	1.0
<b>Total</b>	628.1	648.7

\* Includes general fund appropriations, Health Care Reform Act funds and funds earned by Correctional Services enterprises.

Figure 20-5

## Annual Medicaid Expenditures for People with AIDS

New York State, Federal Fiscal Years 1986 - 1997

Figure 20-5a **AIDS Medicaid Recipients**

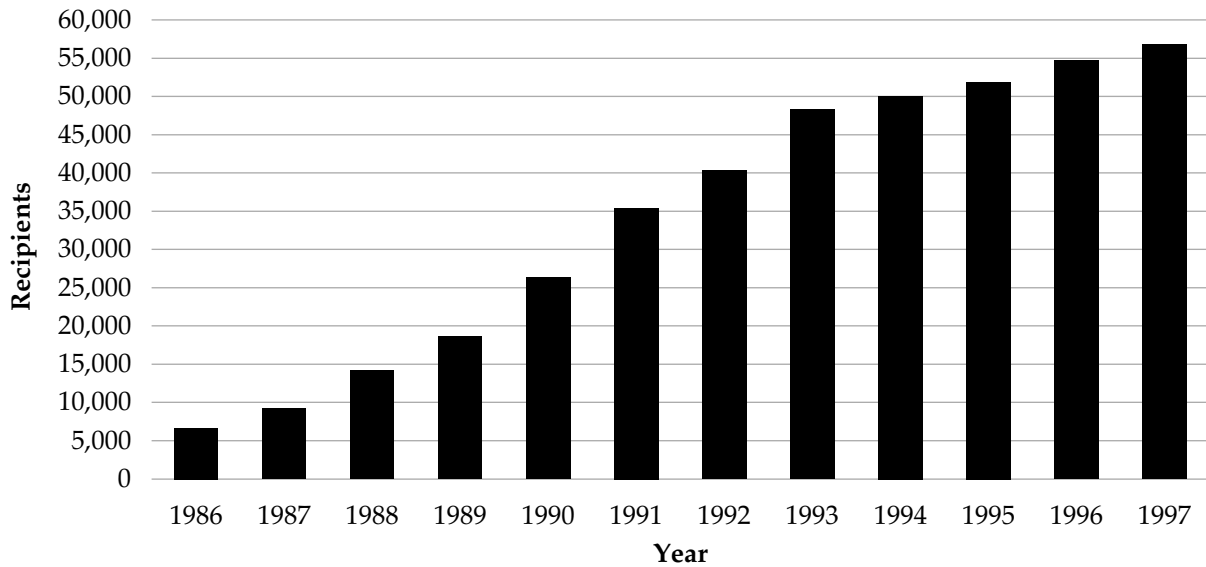


Figure 20-5b **Medicaid Expenditures for People With AIDS**

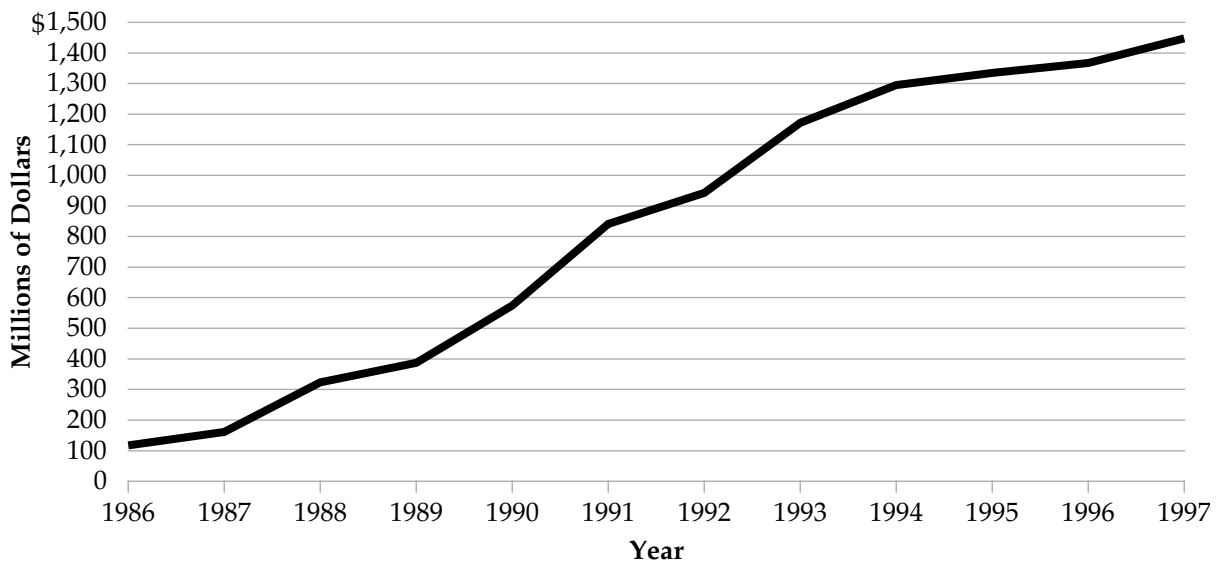


Figure 20-6

## Annual Medicaid Expenditures for People With HIV / AIDS

New York State, Federal Fiscal Years 1986 - 1997

Year	Recipients*	Expenditures	Average Expenditure per Recipient
1986	6,653	\$117,325,196	\$17,635
1987	9,179	161,736,687	17,620
1988	14,183	323,046,167	22,777
1989	18,642	387,570,765	20,790
1990	26,284	574,162,381	21,845
1991	35,401	840,705,352	23,748
1992	40,331	942,158,083	23,361
1993	48,252	1,171,866,626	24,286
1994	50,044	1,294,535,758	25,868
1995	51,880	1,334,279,335	25,718
1996	54,639	1,367,062,885	25,019
1997	56,814	1,447,252,152	25,474

\* Recipients are people with HIV / AIDS who received medical services through the Medicaid Program during the given year.

Figure 20-7

# Medicaid Expenditures for People with AIDS

New York State, Federal Fiscal Year 1997

Service Category	Expenditures	Number of Recipients*	Average Per Recipient*
<b>Total</b>	<b>\$1,447,252,152</b>	<b>56,814</b>	<b>\$25,474</b>
Inpatient	668,964,587	25,580	26,152
Outpatient	86,293,111	39,642	2,177
Emergency Room†	6,225,952	22,085	2,628
Freestanding Clinic	58,041,574	22,085	2,628
Physician	16,845,700	38,848	434
Pharmacy	250,219,153	48,608	5,148
Antiretrovirals, protease inhibitors§	112,853,779	32,669	3,454
Institutional Long Term Care	183,096,762	3,044	60,150
Home Health Care/			
Long Term Home Health Care	97,579,623	7,528	12,962
Personal Care	8,353,908	940	8,887
Other	77,857,734	41,503	1,876

\* Recipients are people with HIV / AIDS who received medical services through the Medicaid Program during federal fiscal year 1997. "Total" category provides the only unduplicated count of recipients.

† The totals for Emergency Room are included in the Outpatient totals.

§ The totals for antiretrovirals and protease inhibitors are included in the Pharmacy totals.